3-HEAD CASSETTE TAPE DECK

CT-F1000

SERVICE MANUAL

AUTOMATIC CrO2 TAPE SELECTOR
SA-C60 TDK
PEAK +5dB
REC
DOLBY NR
dB
MEMORY STOP/PLAY
RESET
MIC/DIN — INPUT — LINE
OUTPUT
PAUSE
REC LIMITER
BIAS
EQ
DOLBY NR
MPX FL
DOLBY REC CAL
TEST 400Hz
MONITOR
TAPE
SOURCE
PHONES
MIC
REW
FF
STOP
PLAY
REC
DOLBY SYSTEM
PIONEER STEREO CASSETTE TAPE DECK CT-F1000

PIONEER®

MODEL CT-F1000 COMES IN FIVE VERSIONS DISTINGUISHED AS FOLLOWS:

Type	Voltage	Remarks
KU	120V only	U.S.A. model
KC	120V only	Canada model
HG	220V and 240V (Switchable)	Europe or Oceania model
D	120V, 220V and 240V (Switchable)	General export model
D/G	120V, 220V and 240V (Switchable)	U.S. Military model

NOTICE:
- This service manual is applicable to the KU and KC types.
- As to the HG, D and D/G types, please refer to page 83.

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- The circuit descriptions and adjustments are issued separately.
- When ordering spare parts and repairing, please confirm the "type" which is described on the packing case because several parts are not interchangeable.
- The wooden case shown in cover is applicable only for the U.S.A. model optionally.

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1. SPECIFICATIONS

Systems	Compact cassette, 2-channel stereo
Motors	Electronically-controlled DC motor (built-in generator) x 1; (4.8cm/s speed drive), DC torque motor x 1; (Fast forward and rewind drive)
Heads	"Uni-crystal ferrite" recording head x 1 "Uni-crystal ferrite" playback head x 1 Combination type Ferrite erasing head x 1
Operation	Solenoid drive, direct switchable and timer play presettable
Fast Winding Time	Approximately 65 seconds (C-60 tape)
Wow and Flutter	No more than 0.05% (WRMS)
Frequency Response	Standard, LH tapes: 20 to 17,000Hz (30 to 15,000Hz ±3dB) Ferri-chromium tape: 20 to 19,000Hz (30 to 17,000Hz ±3dB) Chromium dioxide tape: 20 to 19,000Hz (30 to 17,000Hz ±3dB)
Signal-to-Noise Ratio	Dolby OFF: More than 54dB Dolby ON: More than 64dB (over 5kHz, standard, LH tapes) (When chromium dioxide tape is used, signal-to-noise ratio is further improved by 4.5dB over 5kHz)
Harmonic Distortion	No more than 1.3% (0dB)
Inputs (Sensitivity/Maximum allowable input/Impedance)	MIC (L,R); 0.22mV/100mV/30 kilohms, 6mm diam. jack (Reference MIC impedance; 250 ohms to 30 kilohms) LINE x 4 (2-channel stereo, Parallel connection system); 60mV/25V/100 kilohms) REC/PLAY x 1; Input & output, 10mV/5V/2.2 kilohms 5p jack (DIN standard)
Outputs (Reference level/Maximum level/Load impedance)	LINE x 4; 450mV/680mV/50 kilohms (2-channel stereo, Parallel connection system) REC/PLAY x 1; 450mV/680mV/50 kilohms 5p jack (DIN standard) HEADPHONES x 1; 62mV/93mV/8 ohms, 6mm diam. jack
Semiconductors	
Amplifier Section	Transistors x 98 (including FETs x 4), Diodes x 96 (including Zener Diodes x 7, LEDs x 4), ICs x 4
Motor control Section	Transistors x 3, Diodes x 2, IC x 1

Subfunctions

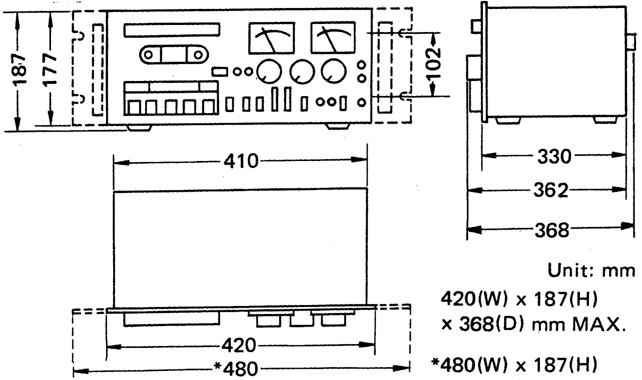
- Dolby system (ON-OFF)
- Dolby calibration (built-in 400Hz test oscillator)
- MPX Filter (ON-OFF)
- Tape Selector (STD/FeCr/CrO_2)
  Automatic tape selector for CrO_2 tape, and Manual tape selector of independently BIAS/EQ
- Cassette compartment illumination
- Mixing control used for MIC and LINE input
- Tape counter with rewind Memory switch (ON-OFF) for starting point [REW—STOP/PLAY (REC)]
- Recording limiter (ON-OFF)
- Wide scale level meter (–40 to +5dB)
- Recording Peak level indicator (Lightable level; +5dB)
- Pitch control (more than ±6% of rated tape speed)
- Level Memory Marker for inputs and output
- MIC, LINE input and output level controls knob with 41 click step

Power Requirements	AC 120V, 220V, 240V (switchable) 50/60Hz (D, D/G model) or AC 220V, 240V (switchable) 50/60Hz (HG model)
Power Consumption	38 watts
Dimensions	420(W) x 187(H) x 368(D)mm Max. 16-9/16 x 7-3/8 x 14-1/2 in
Weight	11.8kg/26 lb (Without package) 14.0kg/32 lb 10 oz (With package)
Furnished parts	Stereo connecting cord with pin plugs x 2 Head cleaning kit x 1 Fuse (D, D/G model only) x 1 (120V; 1.2A or 220V, 240V 800mA) Operating instructions x 1

NOTE:
Specifications and the design subject to possible modification without notice due to improvements.

NOTES:

1. Reference Tapes: Standard & LH: DIN 45513/BLATT6 or equiv.
   : CrO_2: DIN 45513/BLATT7 (CrO2) or equiv.
2. Reference Recording Level: Meter 0dB indicating level (160 nwb/m magnetic level = Philips cassette reference level)
3. Reference Signal: 333Hz
4. Wow & Flutter: • JIS [3kHz, with acoustic compensation (weighted), rms value] • DIN [3150Hz, with acoustic compensation (weighted) PEAK value]; DIN 45507
5. Frequency Response: • Measured at –20dB level, DOLBY OFF, level deviation is ±6dB without indication • DIN is DIN 45500
6. Signal-to-Noise Ratio: • Measured at +4dB level (250nwb/m magnetic level = DIN 45513 specified reference level), IEC A curve with acoustic compensation (weighted) • DIN is DIN 45500
7. Sensitivity: Input level (mV) required for reference recording level with input (REC) controls set to maximum.
8. Maximum Allowable Input: While decreasing settings of input (REC) level controls and increasing level at input jacks, this is the maximum input level (mV) at the point where recording amplifier output waveform becomes clipped.
9. Reference Output Level: Playback output level when meter indicates 0dB.
10. Maximum Output Level: Playback output level with respect to reference recording level when output (PLAY) level controls are set to maximum.



Unit: mm
420(W) x 187(H)
x 368(D) mm MAX.

*480(W) x 187(H)
x 368(D) mm MAX.

*with rackmount adaptor JA-R102

2. CONNECTION DIAGRAM

Connect the CT-F1000's LINE terminals to the tape terminals on the receiver (or stereo amplifier) with the accessory cords. The top terminal is for the left channel and the bottom for the right channel.

If you do not connect properly, you will hear a monotonous single-pitched hum and this will impair your recording.

Connections for playback

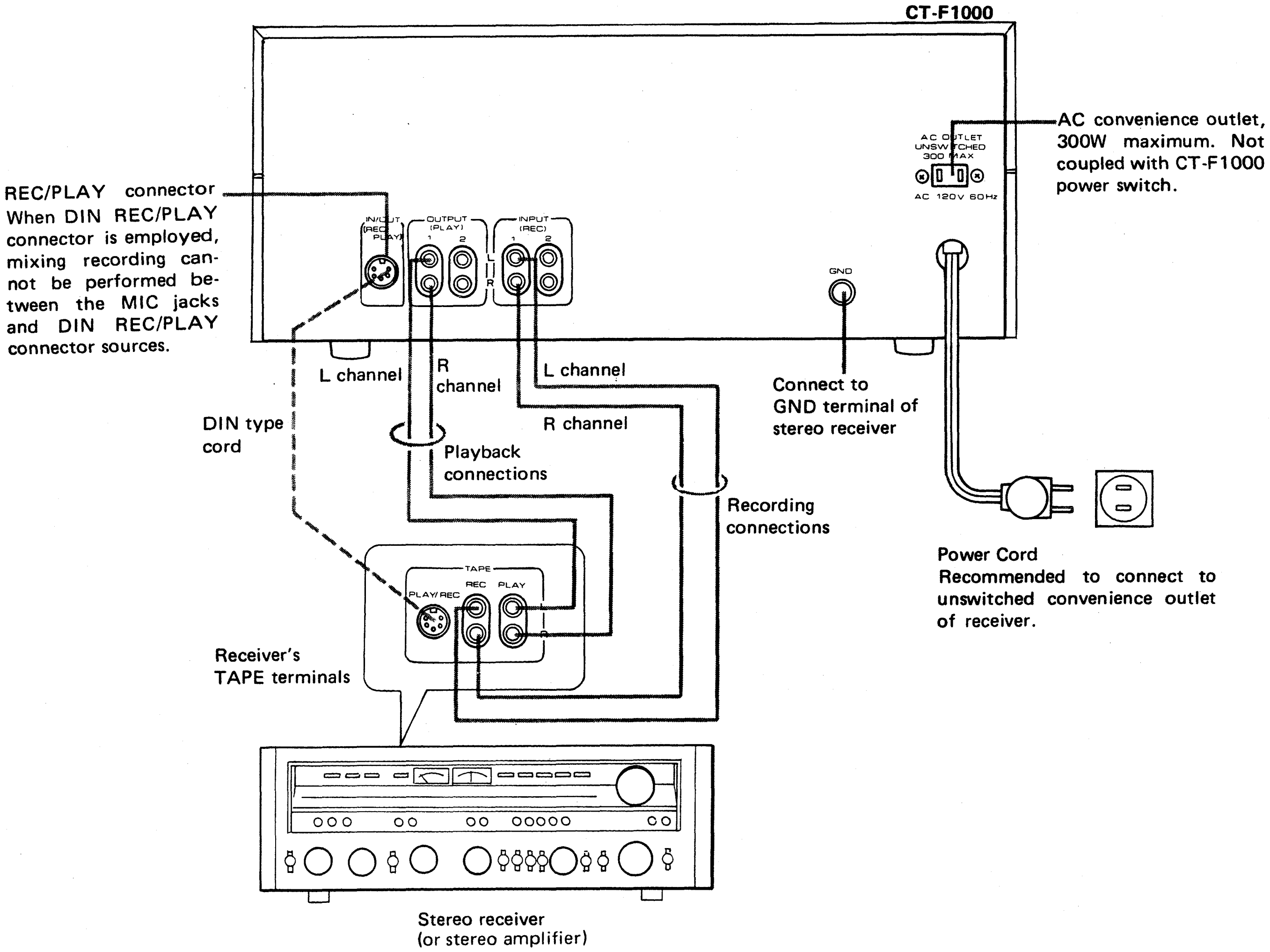
Connect the TAPE PLAY input terminals on the receiver to the CT-F1000's LINE OUTPUT terminals.

Connections for recording

Connect the receiver's TAPE REC output terminals to the CT-F1000's LINE INPUT terminals.

Using the REC/PLAY connectors

You can connect for playback and recording at the same time if you use recording/playback cords which are bought separately, as long as the receiver comes with DIN-standard recording/playback connectors. Use the MIC/DIN recording level controls to adjust the recording level. You will not be able to record the signals from the REC/PLAY connectors if you connect a microphone (or microphones) to the MIC jacks.


CT-F1000
REC/PLAY connector
When DIN REC/PLAY connector is employed, mixing recording cannot be performed between the MIC jacks and DIN REC/PLAY connector sources.
IN/OUT (REC PLAY)
OUTPUT (PLAY)
1
2
L
R
INPUT (REC)
1
2
AC OUTLET UNSWITCHED 300W MAX
AC 120V 60Hz
AC convenience outlet, 300W maximum. Not coupled with CT-F1000 power switch.
GND
L channel
R channel
L channel
R channel
DIN type cord
Playback connections
Recording connections
Connect to GND terminal of stereo receiver
Power Cord
Recommended to connect to unswitched convenience outlet of receiver.
TAPE
REC
PLAY
PLAY/REC
L
R
Receiver's TAPE terminals
Stereo receiver
(or stereo amplifier)

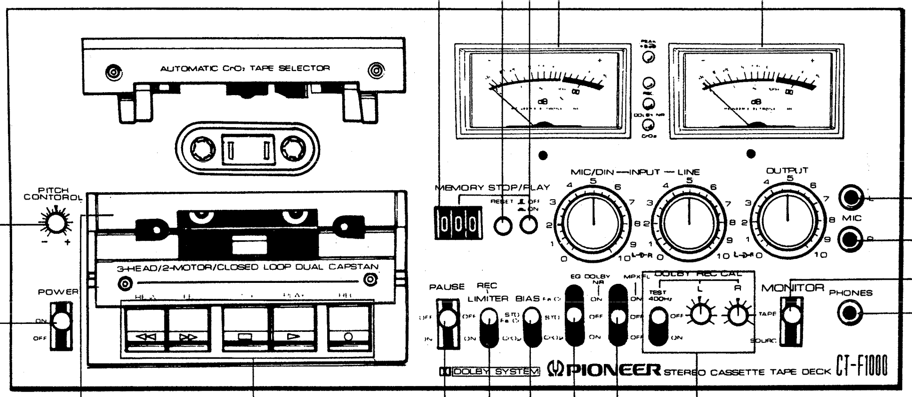
3. FRONT PANEL FACILITIES

POWER SWITCH

Power is supplied when this switch is set to ON, at which time the level meter lamps and the remaining tape display lamp go on.

PITCH CONTROL KNOB

You can use this to make the tape travel 6% faster or slower than the rated tape speed during playback. When this knob is set to the central position, the tape speed is a standard 4.75cm/s. Turn the knob to the left and the speed drops and the musical steps are lowered. Conversely, turn it to the right, and the speed rises and the musical steps are raised. The tape speed does not change while recording.



DUST COVER

Use this cover when you are not using your tape deck and it will stop dust and dirt from entering the head section and rotating parts.

OPERATING LEVERS

REW ◀◀ (rewind): Press down to rewind tape. (Tape travels from right to left).

FF ▶▶ (fast forward): Press down for tape fast forward. (Tape travels from left to right).

STOP ■ : Press down to stop the tape. This action also releases the other operating levers.

PLAY ▶ : Press down to play back the tape. Press down together with the REC lever when recording. (Tape travels from left to right).

REC ● (record): Press down together with the PLAY lever when recording.

NOTE:
The operating levers will not be released if the power is turned off.

PAUSE SWITCH

The tape run is temporarily suspended if this switch is set to ON during recording or playback. When returned to OFF, however, the tape will start to run again. The PAUSE switch will not work if the tape deck is set to the REW or FF modes.

*Dolby and ᗡᗞ are trademarks of Dolby Laboratories Incorporated.

TAPE COUNTER

This indicates the tape running position.

COUNTER RESET BUTTON

Push this button to reset the tape counter to '000.

MEMORY SWITCH

When this switch is set to ON, the position at which the tape counter was set to '000' is memorized during recording or playback, and the memory play and memory stop functions can then be performed.

EQ SWITCH

This selects the recording equalization characteristics according to the type of tape used. Select the same position for playback as for recording according to the characteristics of the recording tape.

Fe-Cr: For ferri-chrome tapes.
STD: For standard and LH tapes.
CrO_2: For chrome tapes.

NOTE:
There is no need to select the suitable position with a chrome tape provided with detection holes since the bias and equalization circuits are activated automatically.

BIAS SWITCH

This selects the recording bias current in accordance with the type of tape used for recording.

STD, Fe-Cr: For standard tapes, LH tapes and ferri-chrome tapes.
CrO_2: For chrome tapes.

REC LIMITER SWITCH

Set this switch to ON and record when there are high variations in the recording level which exceed the reference level, or when it is difficult to control the recording level.

LEVEL METERS

These meters allow you to read out the levels during recording and playback. When the MONITOR switch is set to SOURCE, they indicate the input signal level, and when set to TAPE, they indicate the playback output level.

MIC JACKS

These are the input jacks for microphone recording. The left and right channels can be used independently. Only the microphones' input signals are recorded when the REC/PLAY connector (DIN standard) on the rear panel and the MIC jacks are connected at the same time. Use microphones with an impedance ranging from 250 ohms to 30 kilohms.

MONITOR SWITCH

You can listen to the recorded signals (playback sound) if you set this to TAPE. If you set it to SOURCE, you can listen to the signals just before they are recorded (recording input). While recording, alternately select both positions and monitor your recording. Set this switch to TAPE when playing back a tape.

PHONES JACK

This is the output jack for stereo headphones. Signals selected by the MONITOR switch are available here. Use the jack when you want to monitor your recording or listen to a performance directly from the CT-F1000. The output level is adjustable.

NOTE:
Please use low impedance-type headphones.
If you use high impedance-type headphones, you may not obtain sufficient volume.

DOLBY REC CAL SWITCH & CONTROLS

Use these to adjust the Dolby recording and playback levels in accordance with the type of tape you are using.

TEST 400Hz switch: When set to ON, signals are oscillated for adjusting the recording/playback level. This switch is usually set to OFF.

DOLBY REC CAL (L, R) controls: Use these controls to adjust the Dolby level.

DOLBY NR/MPX FIL SWITCH

Dolby system and multiplex filter.

Set this switch to DOLBY NR ON when recording with the Dolby system or when playing back a tape which has been recorded with the Dolby System.

Set this switch to the MPX FIL ON position when recording (Dolby) without the FM stereo broadcast pilot signal (19kHz).

ON/ON: When playback in Dolby or when recording an FM stereo broadcast in Dolby using an FM tuner with MPX pilot signal leakage.

OFF/OFF: When not recording or playback in Dolby.

ON/OFF: When playback in Dolby or when recording a program source in Dolby other than an FM stereo broadcast, or when using an FM tuner with no MPX pilot signal leakage.

CrO_2 INDICATOR

This indicates that a chrome tape is being used. It also goes on when a cassette has not been inserted into the tape deck. This does not indicate a failure.

DOLBY NR INDICATOR

This lights up when the DOLBY NR switch is set to ON.

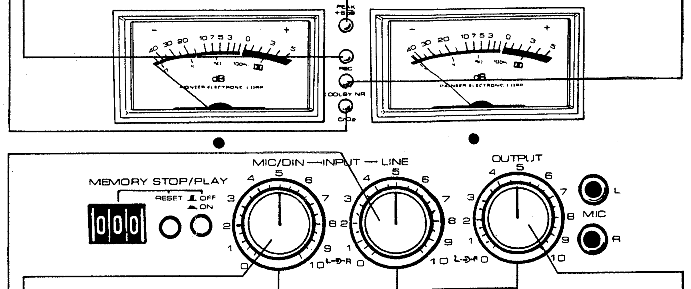
RECORDING INDICATOR (REC)

This red indicator lights up during recording.

NOTE:
Be sure to start recording only after you have checked that the recording indicator is on.

PEAK +5dB INDICATOR

This lights up when the recording level exceeds +5dB. When recording, adjust the level with the INPUT recording level (LINE, MIC/DIN) controls so that this lamp does not light up continuously.



MEMORY MARKER KNOB

You can use this knob to help you remember the level control settings.

OUTPUT LEVEL CONTROLS

Use these controls to adjust the output level when you are playing back a tape. The level increases as the controls are turned to the right. The outer control is for the right channel, and the inner control is for the left channel.

MIC/DIN RECORDING LEVEL CONTROLS

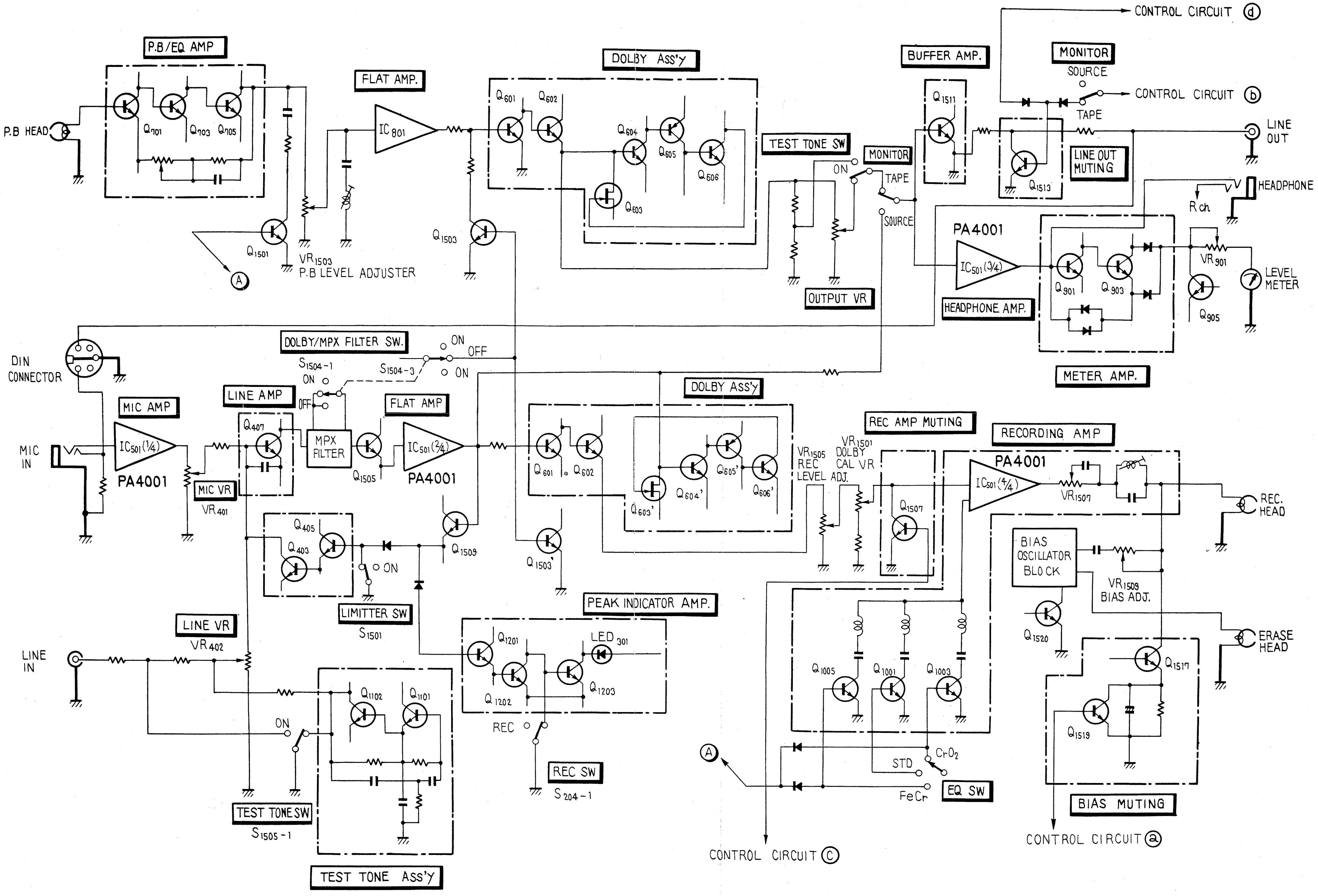
Use these controls to adjust the recording level when you are recording with a microphone (or microphones), or when you are using the rear panel REC/PLAY connector (DIN standard). Use the outer control for the right channel and the inner control for the left channel. Input signals from both the MIC jacks and REC/PLAY connector cannot be recorded simultaneously.

LINE RECORDING LEVEL CONTROLS

These adjust the recording input level from the LINE INPUT terminals on the rear panel. The level increases as the controls are turned to the right. The outer control is for the right channel and the inner control, for the left channel.

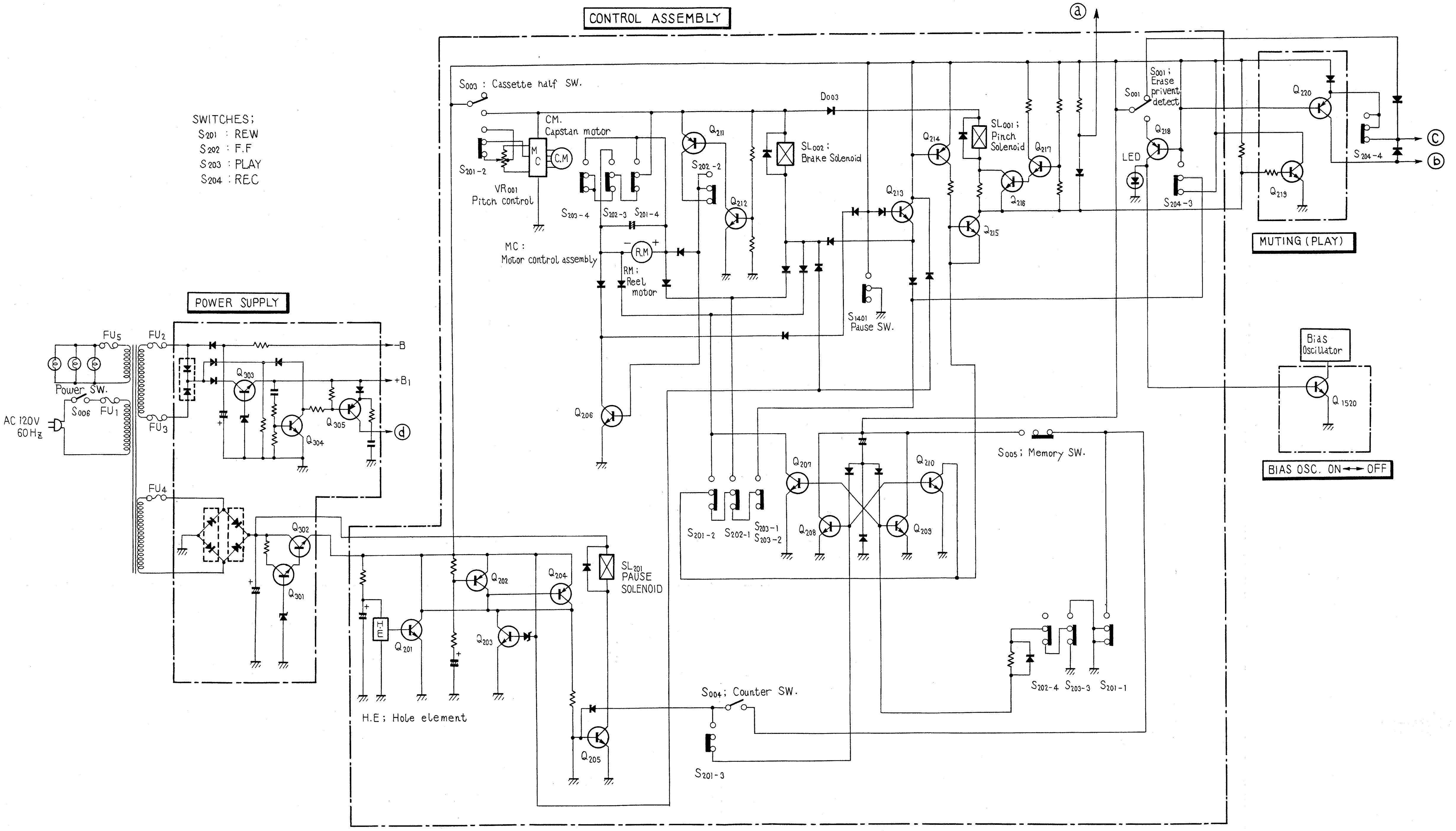
4. BLOCK DIAGRAM

Playback and Recording Routes



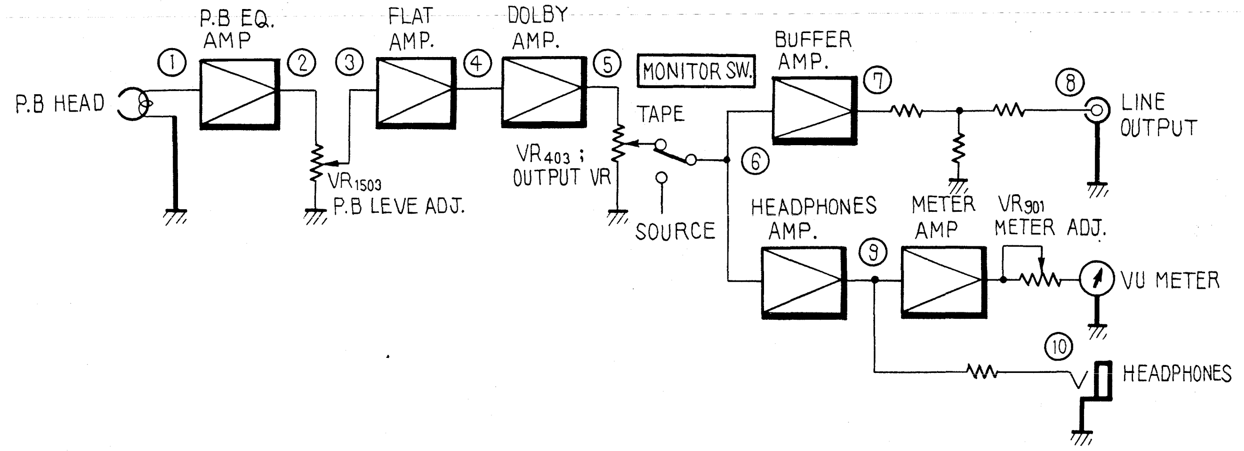
P.B/EQ AMP
P.B HEAD
Q701
Q703
Q705
FLAT AMP.
IC801
Q1501
VR1503
P.B LEVEL ADJUSTER
Ⓐ
DOLBY ASS'Y
Q601
Q602
Q603
Q604
Q605
Q606
Q1503
TEST TONE SW
MONITOR
ON
TAPE
SOURCE
OUTPUT VR
BUFFER AMP.
Q1511
MONITOR
SOURCE
TAPE
CONTROL CIRCUIT ⓓ
CONTROL CIRCUIT ⓑ
LINE OUT MUTING
Q1513
LINE OUT
HEADPHONE
R ch.
PA4001
IC501(3/4)
HEADPHONE AMP.
Q901
Q903
VR901
Q905
LEVEL METER
METER AMP.
DIN CONNECTOR
DOLBY/MPX FILTER SW.
S1504-1
S1504-3
ON
OFF
ON
MIC AMP
MIC IN
IC501(1/4)
PA4001
MIC VR
VR401
LINE AMP
Q407
MPX FILTER
Q1505
FLAT AMP
IC501(2/4)
PA4001
Q1509
Q405
Q403
ON
LIMITTER SW
S1501
DOLBY ASS'Y
Q601'
Q602'
Q603'
Q604'
Q605'
Q606'
Q1503'
PEAK INDICATOR AMP.
Q1201
Q1202
Q1203
LED301
REC
REC SW
S204-1
LINE VR
VR402
LINE IN
ON
Q1102
Q1101
TEST TONE SW
S1505-1
TEST TONE ASS'Y
VR1505 REC LEVEL ADJ.
VR1501 DOLBY CAL VR
REC AMP MUTING
Q1507
RECORDING AMP
PA4001
IC501(4/4)
VR1507
REC. HEAD
BIAS OSCILLATOR BLOCK
VR1509 BIAS ADJ.
Q1520
ERASE HEAD
Q1005
Q1001
Q1003
Q1517
Q1519
Ⓐ
STD
CrO2
FeCr
EQ SW
BIAS MUTING
CONTROL CIRCUIT ⓒ
CONTROL CIRCUIT ⓐ

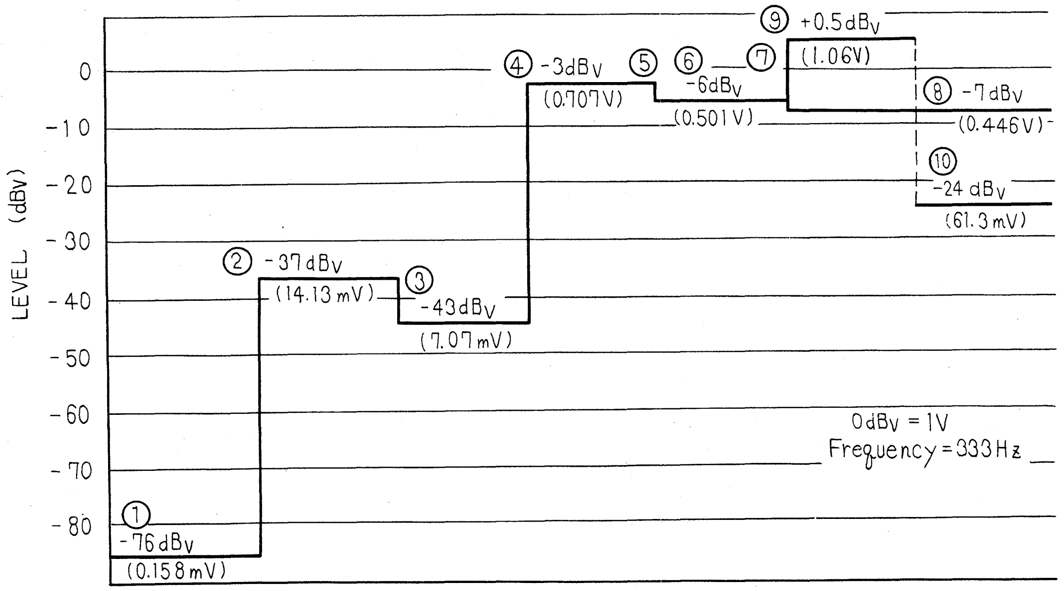
Control Function Routes


SWITCHES;
S_{201} : REW
S_{202} : F.F
S_{203} : PLAY
S_{204} : REC
CONTROL ASSEMBLY
POWER SUPPLY
MUTING (PLAY)
BIAS OSC. ON ←→ OFF
Bias Oscillator
S_{003} : Cassette half SW.
D_{003}
CM. Capstan motor
C.M
S_{201-2}
VR001 Pitch control
S_{203-4}
S_{202-3}
S_{201-4}
MC : Motor control assembly
RM ; Reel motor
R.M
Q_{211}
S_{202-2}
Q_{212}
SL_{002} ; Brake Solenoid
Q_{213}
Q_{214}
SL_{001} ; Pinch Solenoid
Q_{217}
Q_{216}
Q_{215}
S_{1401} Pause SW.
S_{001}
S_{001} ; Erase privent detect
Q_{218}
LED
S_{204-3}
Q_{220}
Q_{219}
S_{204-4}
ⓐ
ⓑ
ⓒ
ⓓ
Q_{1520}
FU5
FU2
FU3
FU4
FU1
Power SW.
S_{006}
AC 120V 60Hz
-B
+B1
Q_{303}
Q_{304}
Q_{305}
Q_{302}
Q_{301}
Q_{206}
Q_{207}
Q_{210}
Q_{208}
Q_{209}
S_{201-2}
S_{202-1}
S_{203-1}
S_{203-2}
S_{005}; Memory SW.
Q_{202}
Q_{204}
SL_{201} PAUSE SOLENOID
H.E
Q_{201}
Q_{203}
H.E ; Hole element
Q_{205}
S_{004}; Counter SW.
S_{201-3}
S_{202-4}
S_{203-3}
S_{201-1}

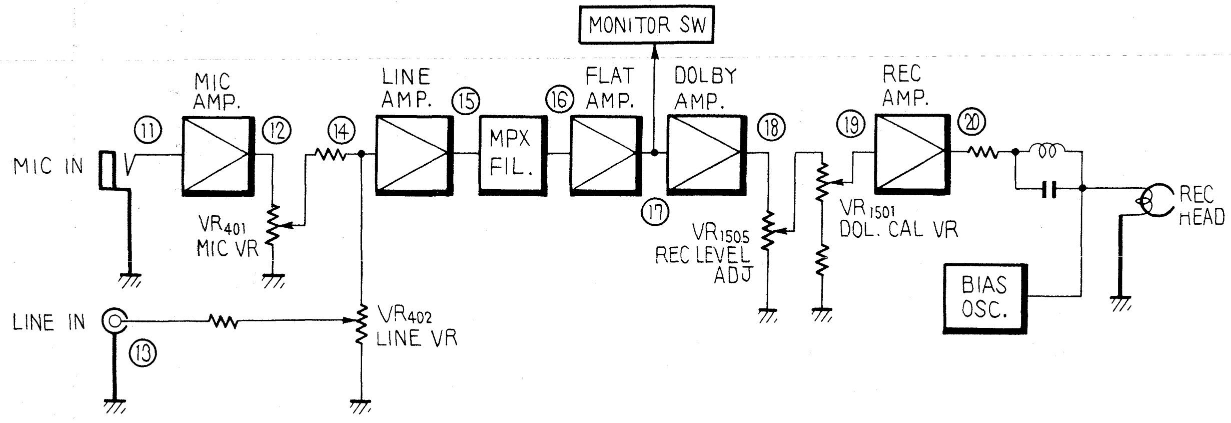
5. LEVEL DIAGRAM

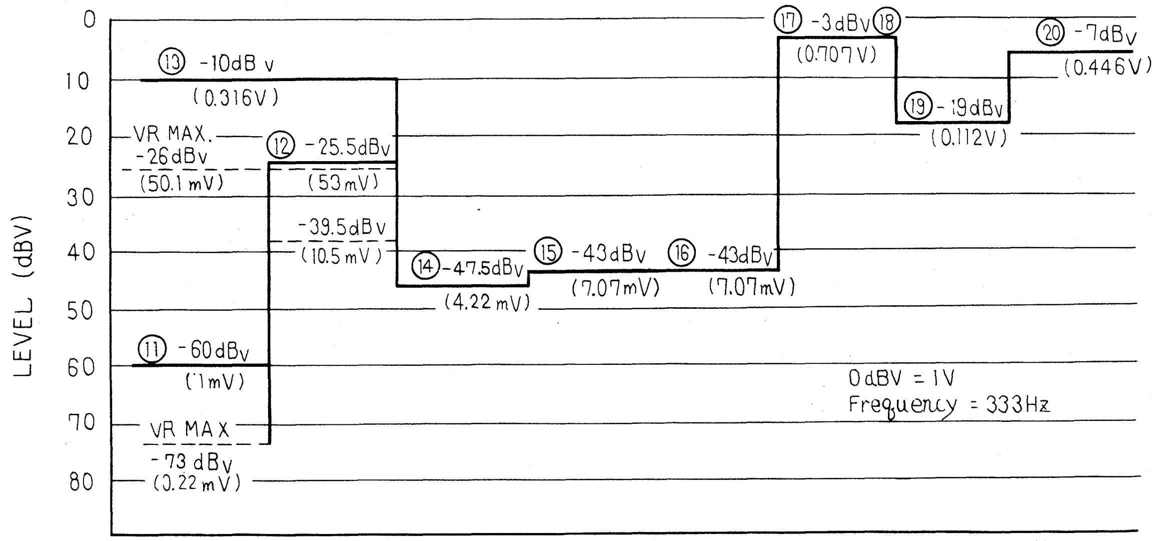
PLAYBACK


P.B EQ. AMP
FLAT AMP.
DOLBY AMP.
BUFFER AMP.
MONITOR SW.
P.B HEAD
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
VR1503
P.B LEVE ADJ.
VR403 ; OUTPUT VR
TAPE
SOURCE
LINE OUTPUT
HEADPHONES AMP.
METER AMP
VR901 METER ADJ.
VU METER
HEADPHONES



RECORDING


MONITOR SW
MIC AMP.
LINE AMP.
MPX FIL.
FLAT AMP.
DOLBY AMP.
REC AMP.
MIC IN
LINE IN
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
VR401 MIC VR
VR402 LINE VR
VR1505 REC LEVEL ADJ
VR1501 DOL. CAL VR
BIAS OSC.
REC HEAD



6. DISASSEMBLY

Outer Coverings (Fig. 1)

1. First undo the 8 screws (A) securing the bonnet.
2. Then remove all front panel control knobs, and undo the 6 screws (B) securing the front panel.
3. Next undo the 6 screws (C) securing the mechanical assembly.
4. Finally undo the 5 screws (D) securing the bottom plate.

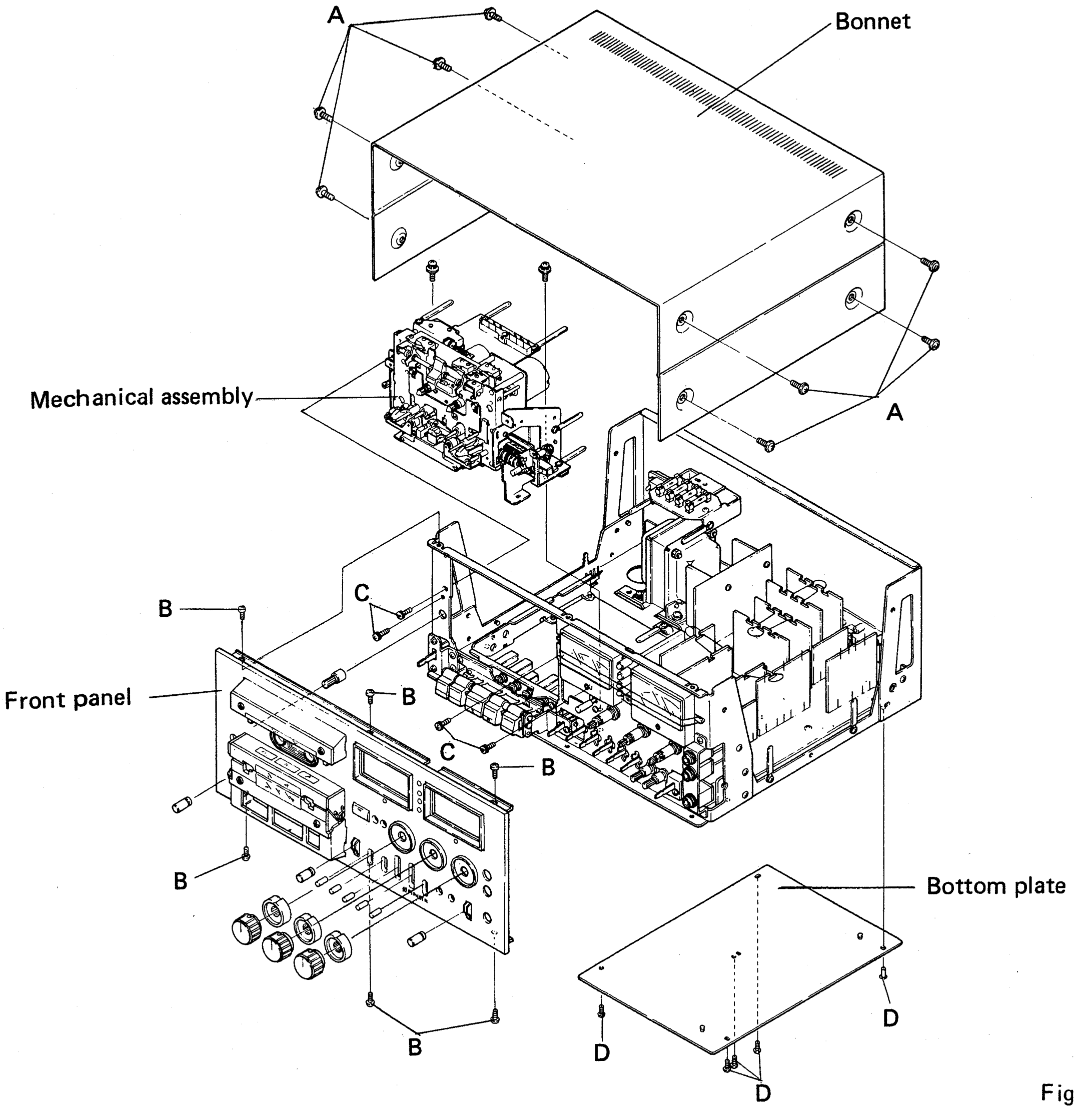

A
Bonnet
A
Mechanical assembly
C
B
Front panel
B
C
B
B
B
Bottom plate
D
D
D

Fig. 1

Head Assembly (Fig. 2)

1. Remove the height adjuster, plus E type and polyethylene washers to release the pinch roller arm assemblies.
2. The recording/playback head and eraseing head are both incorporated in the head assembly (RXA-866-0), and cannot be independently removed from the head base assembly. Note that electrical adjustments must always be performed when a new head assembly is inserted.

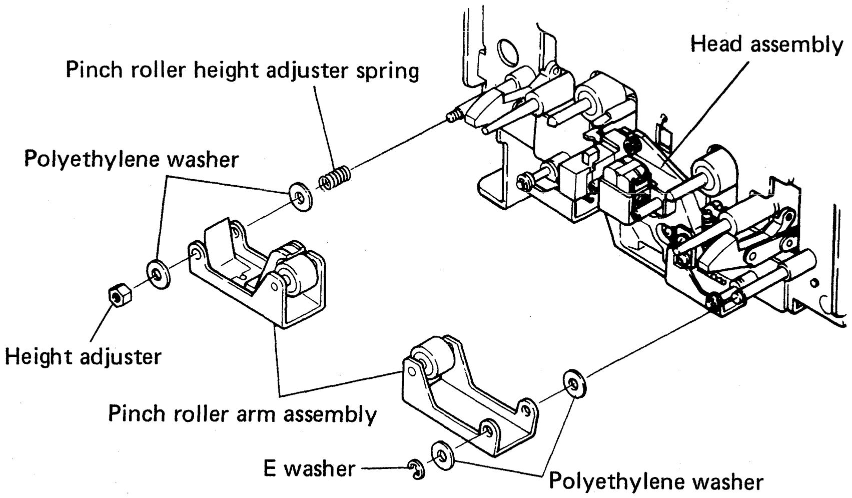

Head assembly
Pinch roller height adjuster spring
Polyethylene washer
Height adjuster
Pinch roller arm assembly
E washer
Polyethylene washer

Fig. 2

Meter Lamp Replacements (Fig. 3)

1. Remove the meter cover.
2. Meter lamps are soldered into position. When replacing, be especially careful not to touch the meter needle or meter scale with the soldering iron.

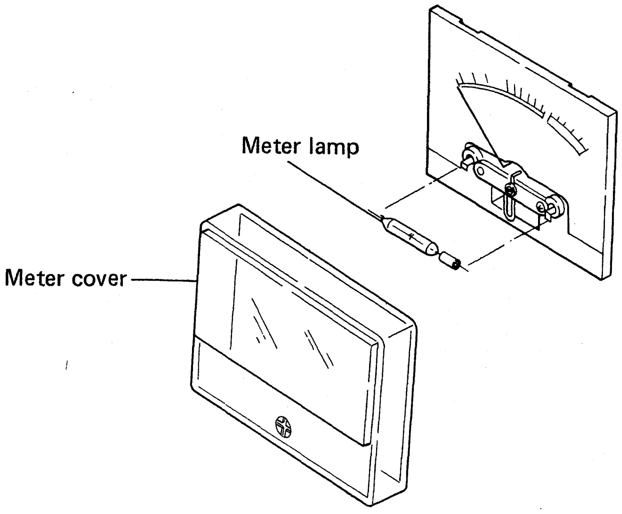

Meter lamp
Meter cover

Fig. 3

Mechanical Assembly plus Sub-Assembly (Fig. 4)

1. First remove the 6 screws (G) securing the sub-assembly, and then the 2 screws (H) securing the capstan motor.
2. Undo the 3 screws (I) securing the supply reel base assembly, and the 3 screws (J) securing the take-up reel base assembly.
3. Then undo the 3 screws (K) securing the fast forward motor bracket, and the 2 screws (L) securing the fast forward motor.

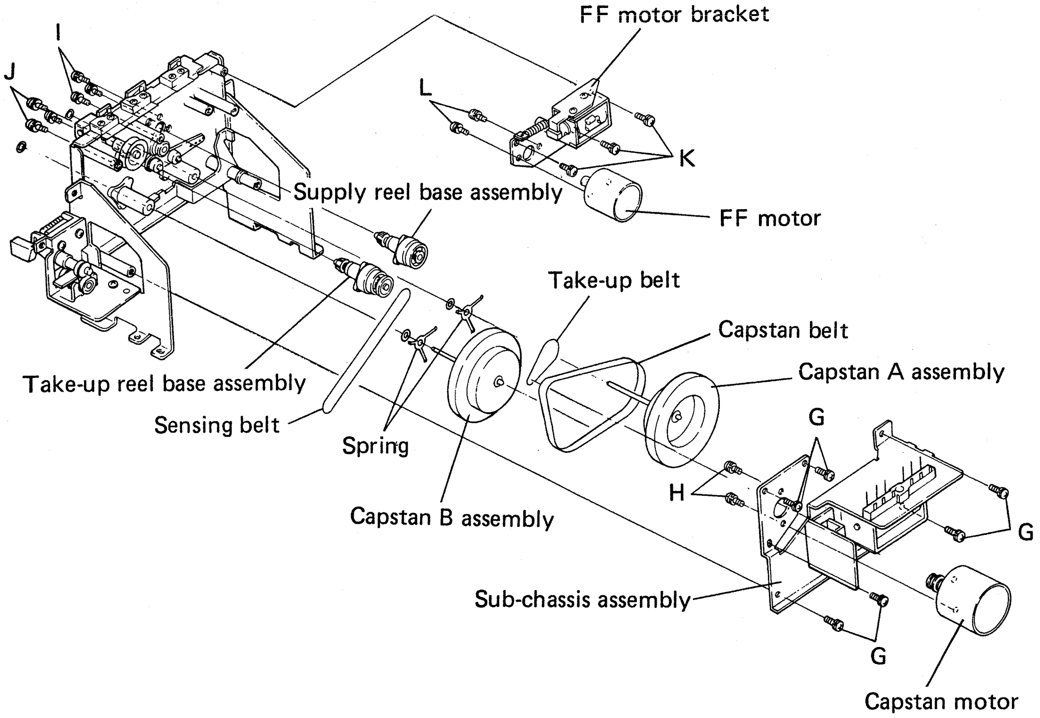
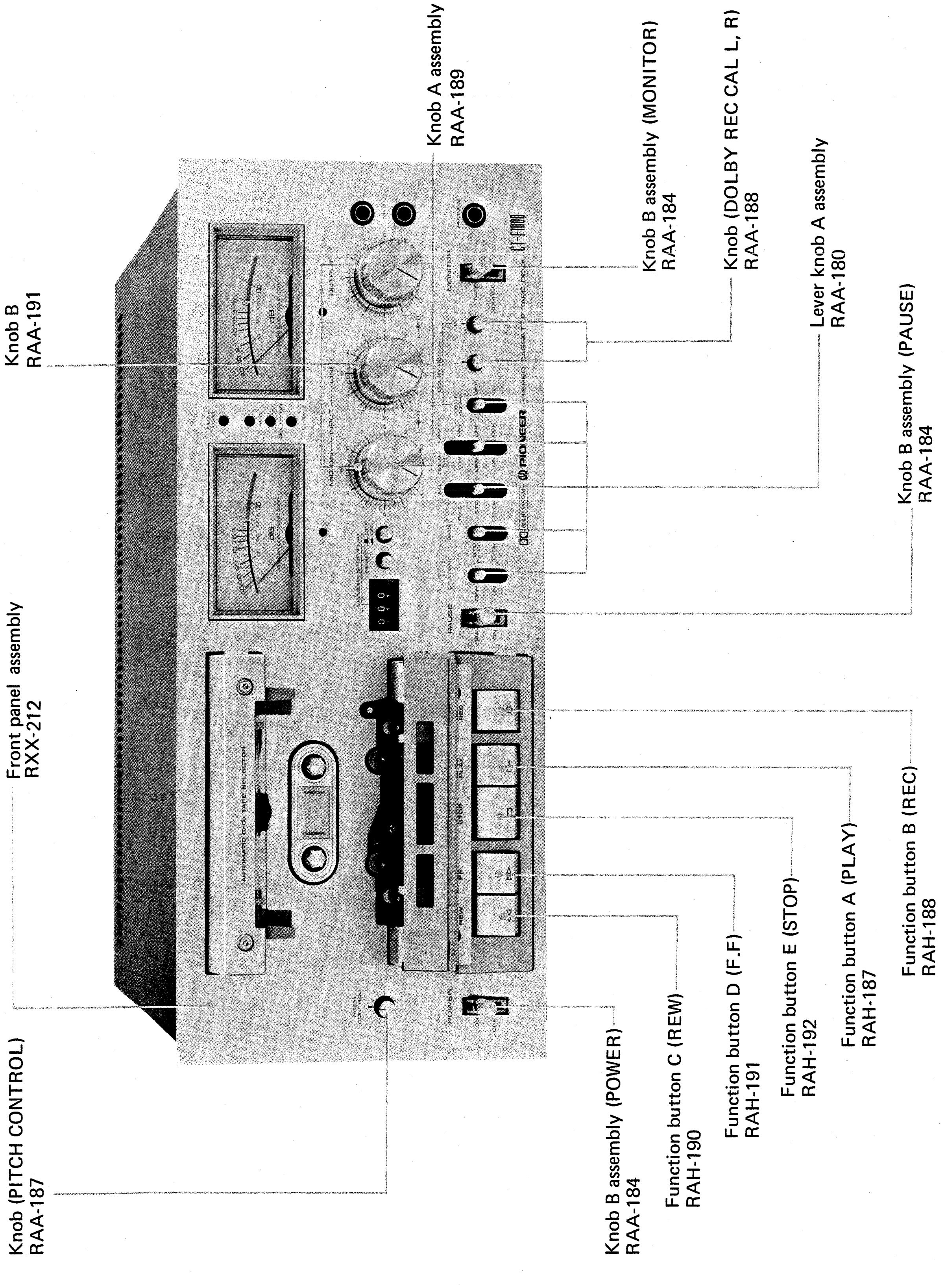

FF motor bracket
I
J
L
K
Supply reel base assembly
FF motor
Take-up belt
Capstan belt
Capstan A assembly
Take-up reel base assembly
Sensing belt
Spring
G
H
G
Capstan B assembly
Sub-chassis assembly
G
Capstan motor

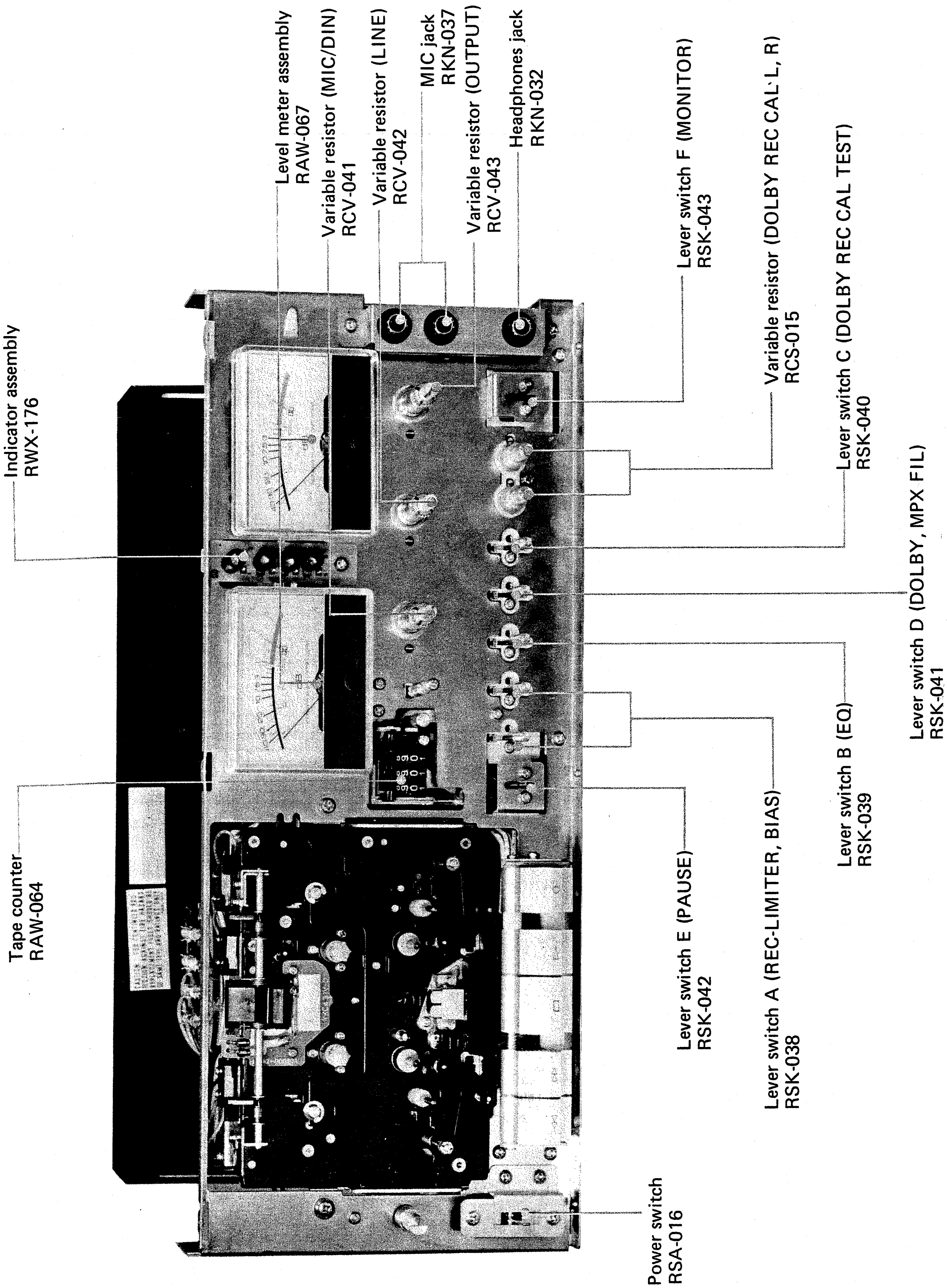
Fig. 4

7. PARTS LOCATION

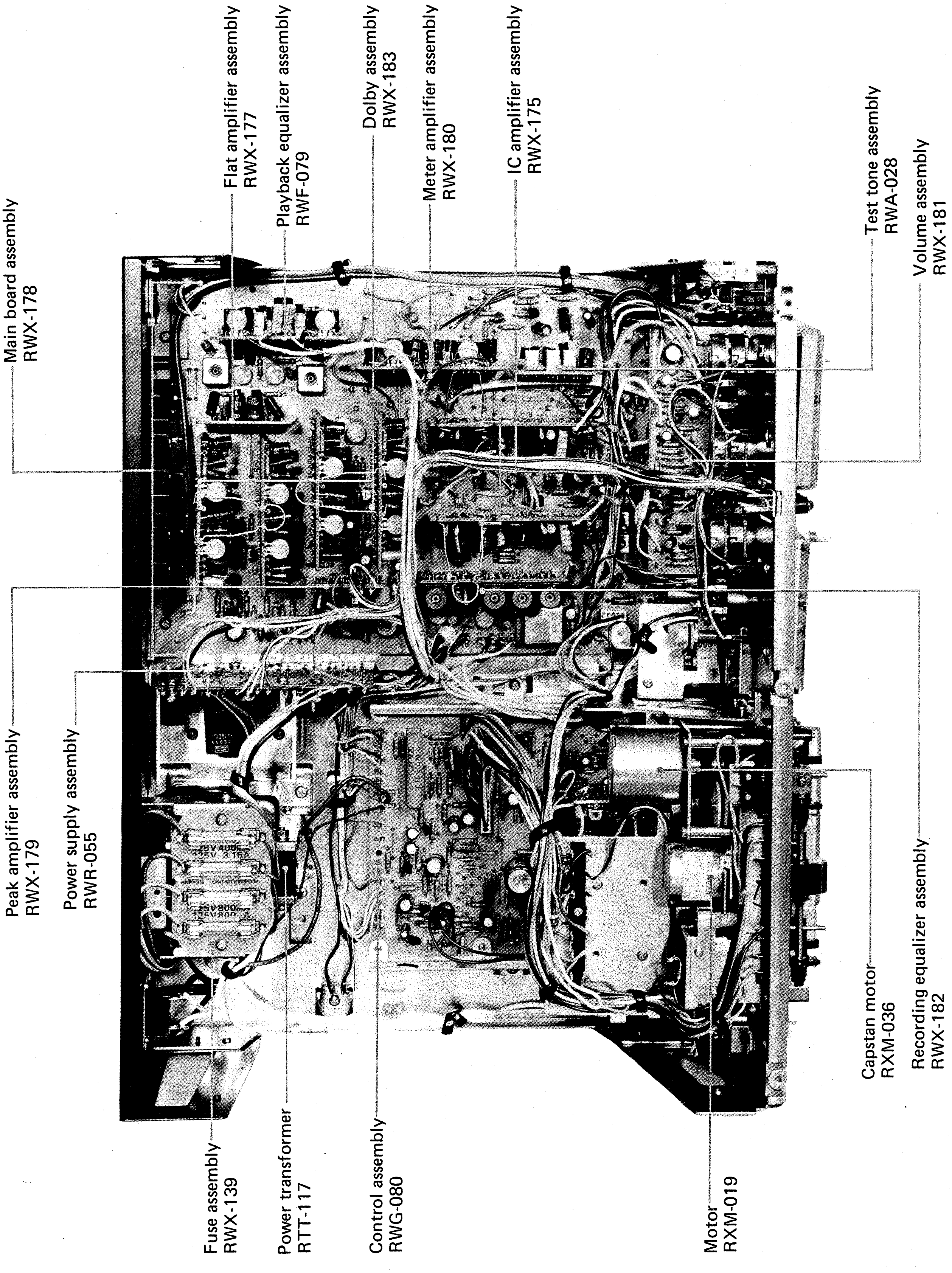
7.1 FRONT PANEL VIEW


Knob A assembly
RAA-189
Knob B assembly (MONITOR)
RAA-184
Knob (DOLBY REC CAL L, R)
RAA-188
Lever knob A assembly
RAA-180
Knob B assembly (PAUSE)
RAA-184
Knob B
RAA-191
Front panel assembly
RXX-212
Knob (PITCH CONTROL)
RAA-187
Knob B assembly (POWER)
RAA-184
Function button C (REW)
RAH-190
Function button D (F.F)
RAH-191
Function button E (STOP)
RAH-192
Function button A (PLAY)
RAH-187
Function button B (REC)
RAH-188

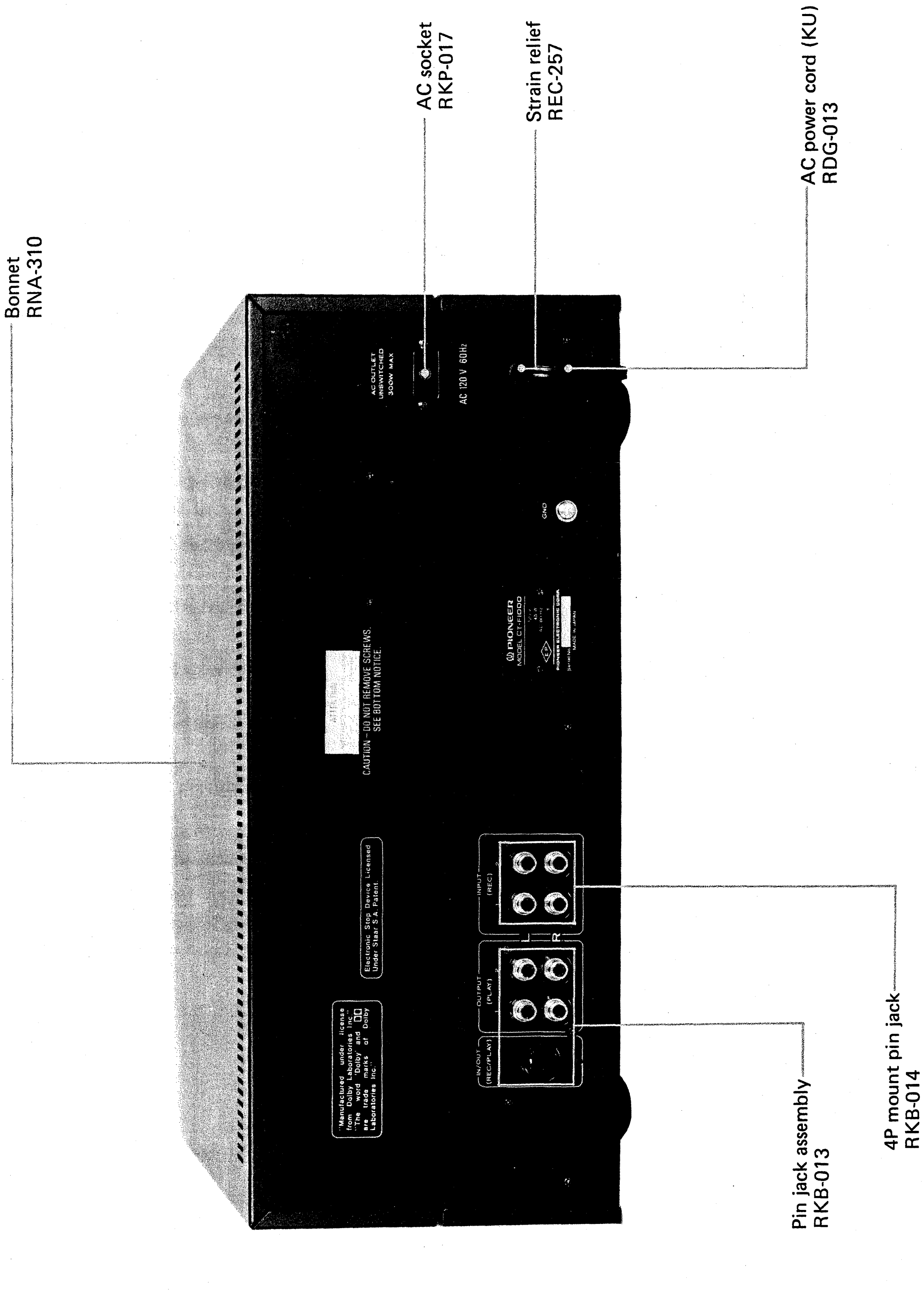
7.2 FRONT VIEW WITH FRONT PANEL REMOVED


Indicator assembly
RWX-176
Tape counter
RAW-064
Level meter assembly
RAW-067
Variable resistor (MIC/DIN)
RCV-041
Variable resistor (LINE)
RCV-042
MIC jack
RKN-037
Variable resistor (OUTPUT)
RCV-043
Headphones jack
RKN-032
Lever switch F (MONITOR)
RSK-043
Lever switch E (PAUSE)
RSK-042
Power switch
RSA-016
Variable resistor (DOLBY REC CAL·L, R)
RCS-015
Lever switch A (REC-LIMITER, BIAS)
RSK-038
Lever switch C (DOLBY REC CAL TEST)
RSK-040
Lever switch B (EQ)
RSK-039
Lever switch D (DOLBY, MPX FIL)
RSK-041

7.3 TOP VIEW WITH BONNET REMOVED


Main board assembly RWX-178
Flat amplifier assembly RWX-177
Playback equalizer assembly RWF-079
Dolby assembly RWX-183
Meter amplifier assembly RWX-180
IC amplifier assembly RWX-175
Test tone assembly RWA-028
Volume assembly RWX-181
Peak amplifier assembly RWX-179
Power supply assembly RWR-055
Capstan motor RXM-036
Recording equalizer assembly RWX-182
Fuse assembly RWX-139
Power transformer RTT-117
Control assembly RWG-080
Motor RXM-019

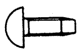
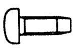
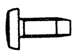
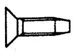
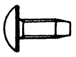
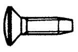
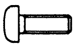
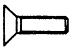
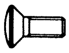
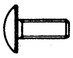
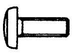
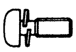
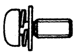
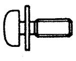
7.4 REAR PANEL VIEW

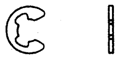
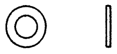
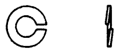
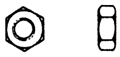
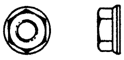
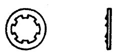
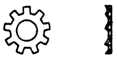
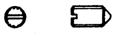
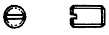
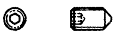
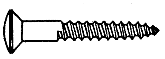
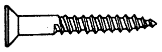
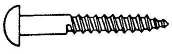

Bonnet
RNA-310
AC socket
RKP-017
Strain relief
REC-257
AC power cord (KU)
RDG-013
Pin jack assembly
RKB-013
4P mount pin jack
RKB-014
AC OUTLET
UNSWITCHED
300W MAX
AC 120 V 60Hz
GND
PIONEER
MODEL CT-F1000
MADE IN JAPAN
CAUTION - DO NOT REMOVE SCREWS.
SEE BOTTOM NOTICE.
INPUT (REC)
OUTPUT (PLAY)
IN/OUT (REC/PLAY)
L
R
Electronic Stop Device Licensed Under Staar S.A. Patent.
"Manufactured under license from Dolby Laboratories Inc." "The word 'Dolby' and DD are trade marks of Dolby Laboratories Inc."

8. EXPLODED VIEWS

Nomenclature of Screws, Washers and Nuts

The following symbols stand for screws, washers and nuts as shown in exploded view.

Symbol	Description	Shape
RT	Brazier head tapping screw	
PT	Pan head tapping screw	
BT	Binding head tapping screw	
CT	Countersunk head tapping screw	
TT	Truss head tapping screw	
OCT	Oval countersunk head tapping screw	
PM	Pan head machine screw	
CM	Countersunk head machine screw	
OCM	Oval countersunk head machine screw	
TM	Truss head machine screw	
BM	Binding head machine screw	
PSA	Pan head screw with spring lock washer	
PSB	Pan head screw with spring lock washer and flat washer	
PSF	Pan head screw with flat washer	

Symbol	Description	Shape
EW	E type washer	
FW	Flat washer	
SW	Spring lock washer	
N	Nut	
WN	Washer faced nut	
ITW	Internal toothed lock washer	
OTW	Outernal toothed lock washer	
SC	Slotted set screw (Cone point)	
SF	Slotted set screw (Flat point)	
HS	Hexagon socket headless set screw	
OCW	Oval countersunk head wood screw	
CW	Countersunk head wood screw	
RW	Round head wood screw	

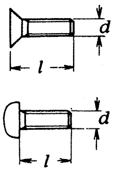
EXAMPLE

PM・3x8

length in mm (l)

diameter in mm (d)

Symbol

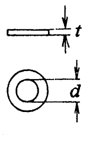


FW・9ϕx1^t

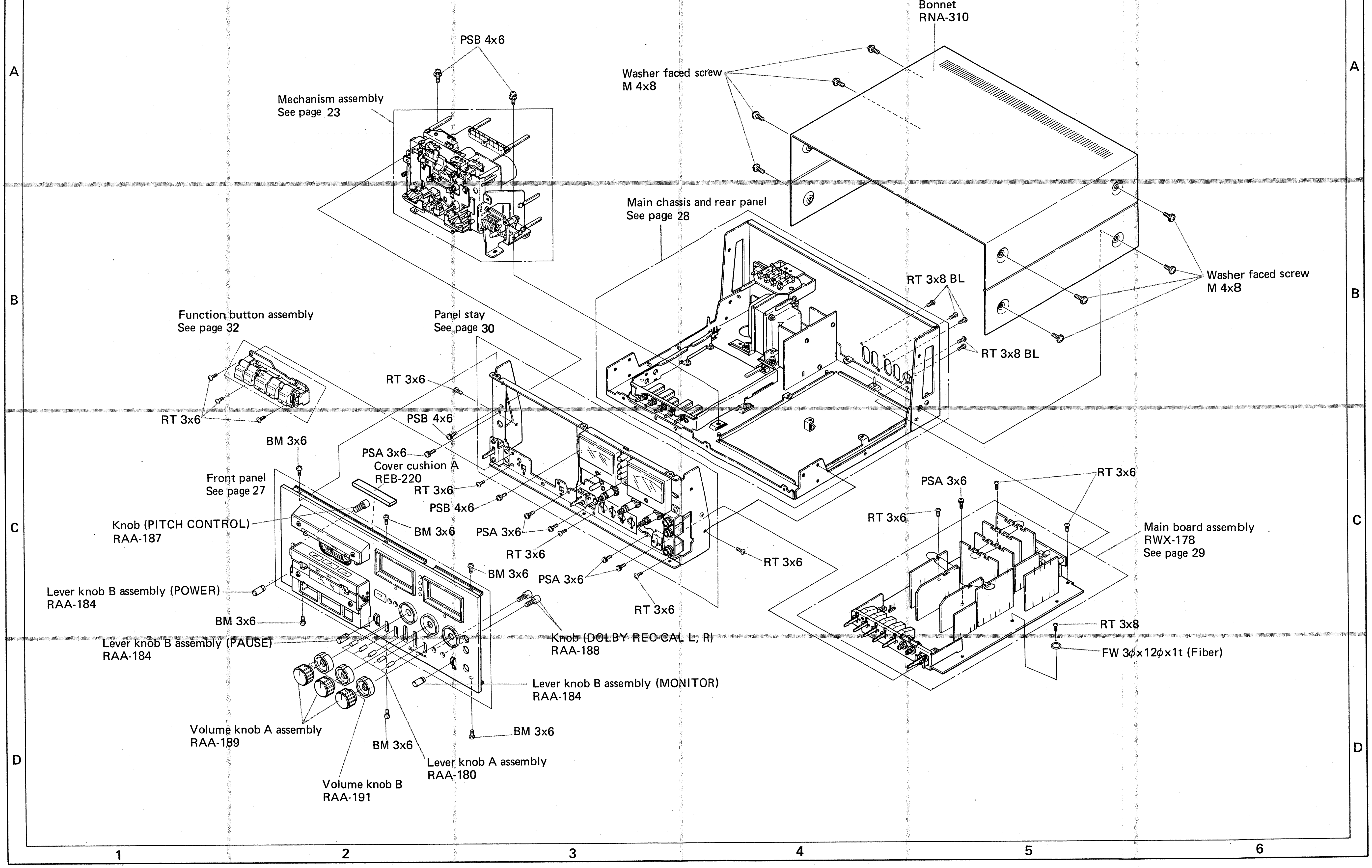
thickness in mm (t)

diameter in mm (d)

Symbol

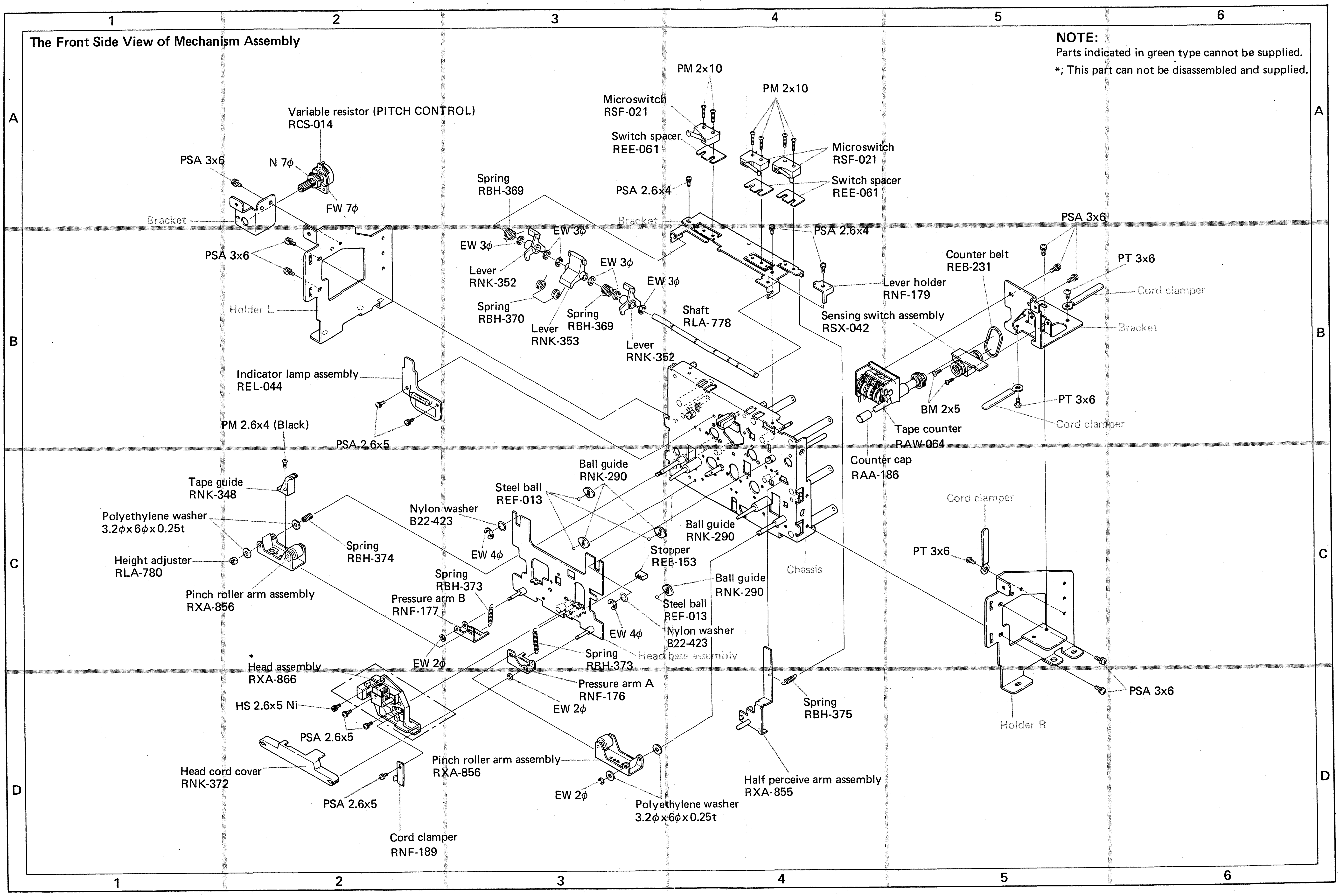


The Whole View


1
2
3
4
5
6
A
B
C
D
PSB 4x6
Mechanism assembly
See page 23
Washer faced screw
M 4x8
Bonnet
RNA-310
Main chassis and rear panel
See page 28
RT 3x8 BL
RT 3x8 BL
Washer faced screw
M 4x8
Function button assembly
See page 32
Panel stay
See page 30
RT 3x6
RT 3x6
PSB 4x6
BM 3x6
PSA 3x6
Cover cushion A
REB-220
Front panel
See page 27
RT 3x6
PSB 4x6
Knob (PITCH CONTROL)
RAA-187
BM 3x6
PSA 3x6
RT 3x6
RT 3x6
BM 3x6
PSA 3x6
Lever knob B assembly (POWER)
RAA-184
RT 3x6
BM 3x6
Knob (DOLBY REC CAL L, R)
RAA-188
Lever knob B assembly (PAUSE)
RAA-184
Lever knob B assembly (MONITOR)
RAA-184
BM 3x6
Volume knob A assembly
RAA-189
BM 3x6
Lever knob A assembly
RAA-180
Volume knob B
RAA-191
PSA 3x6
RT 3x6
RT 3x6
Main board assembly
RWX-178
See page 29
RT 3x8
FW 3ϕx12ϕx1t (Fiber)

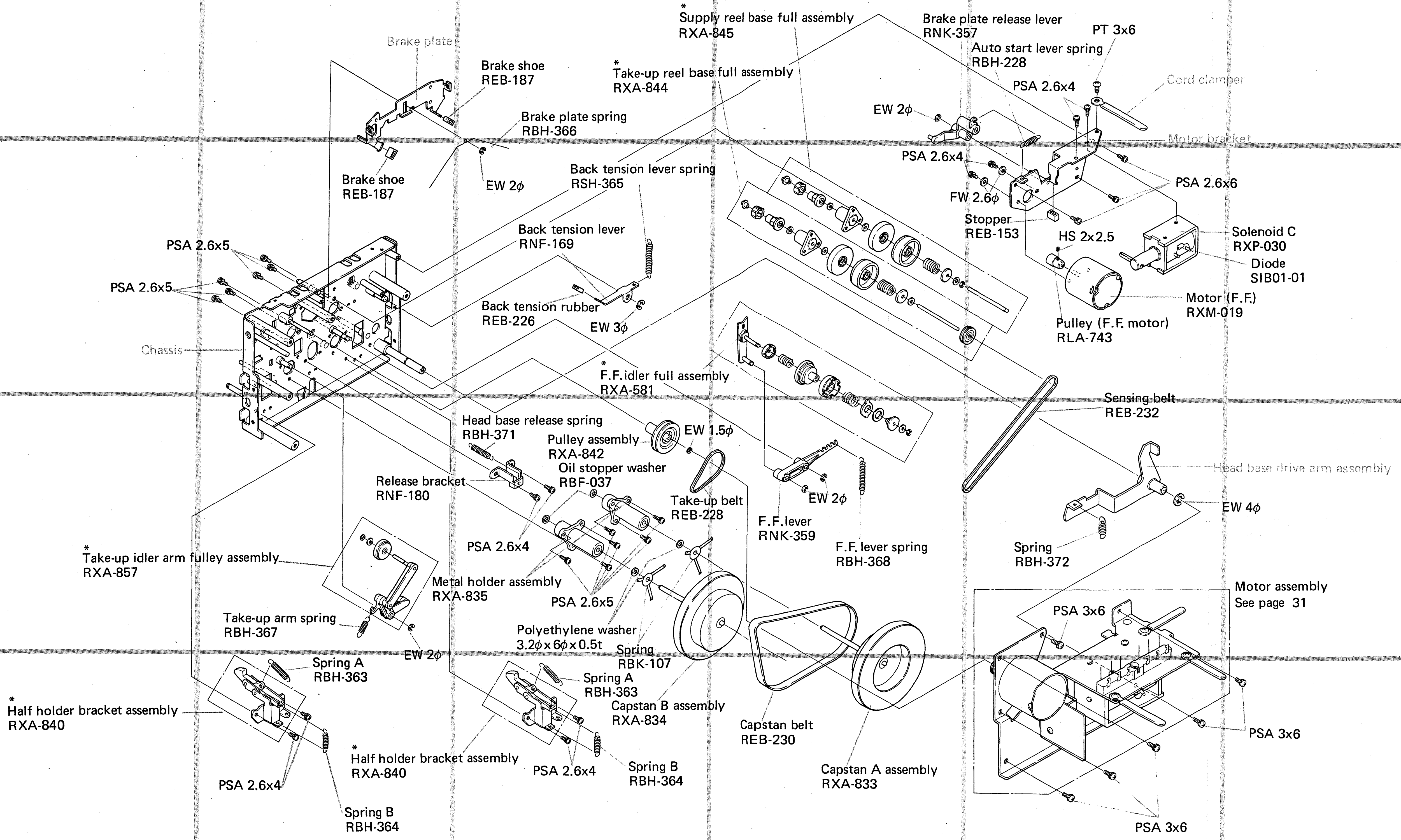
The Front Side View of Mechanism Assembly

NOTE:
Parts indicated in green type cannot be supplied.
*; This part can not be disassembled and supplied.


1
2
3
4
5
6
A
B
C
D
PM 2x10
Microswitch
RSF-021
Switch spacer
REE-061
PM 2x10
Microswitch
RSF-021
Switch spacer
REE-061
Variable resistor (PITCH CONTROL)
RCS-014
PSA 3x6
N 7φ
FW 7φ
Bracket
PSA 3x6
Holder L
Spring
RBH-369
EW 3φ
EW 3φ
Lever
RNK-352
EW 3φ
EW 3φ
Spring
RBH-370
Lever
RNK-353
Spring
RBH-369
Lever
RNK-352
PSA 2.6x4
Bracket
PSA 2.6x4
Shaft
RLA-778
Lever holder
RNF-179
Sensing switch assembly
RSX-042
Counter belt
REB-231
PSA 3x6
PT 3x6
Cord clamper
Bracket
BM 2x5
PT 3x6
Cord clamper
Tape counter
RAW-064
Counter cap
RAA-186
Indicator lamp assembly
REL-044
PSA 2.6x5
PM 2.6x4 (Black)
Tape guide
RNK-348
Polyethylene washer
3.2φx6φx0.25t
Spring
RBH-374
Height adjuster
RLA-780
Pinch roller arm assembly
RXA-856
Ball guide
RNK-290
Steel ball
REF-013
Nylon washer
B22-423
EW 4φ
Ball guide
RNK-290
Stopper
REB-153
Chassis
Spring
RBH-373
Pressure arm B
RNF-177
Ball guide
RNK-290
Steel ball
REF-013
Nylon washer
B22-423
EW 4φ
Head base assembly
Cord clamper
PT 3x6
*
Head assembly
RXA-866
EW 2φ
Spring
RBH-373
Pressure arm A
RNF-176
EW 2φ
HS 2.6x5 Ni
PSA 2.6x5
Spring
RBH-375
PSA 3x6
Holder R
Head cord cover
RNK-372
PSA 2.6x5
Pinch roller arm assembly
RXA-856
EW 2φ
Polyethylene washer
3.2φx6φx0.25t
Half perceive arm assembly
RXA-855
Cord clamper
RNF-189
1
2
3
4
5
6

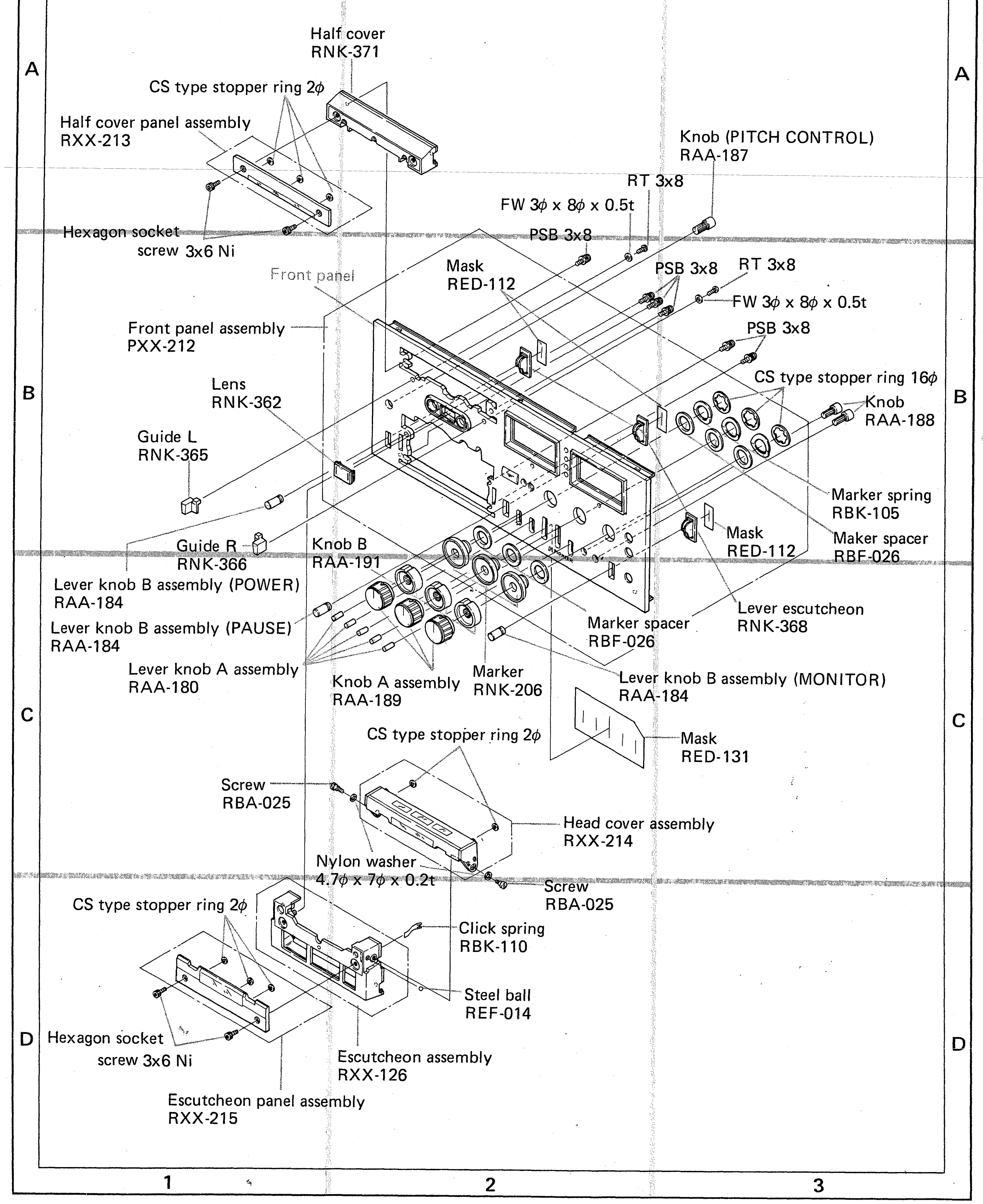
The Rear Side View of Mechanism Assembly

NOTE:
Parts indicated in green type cannot be supplied.
*: This part cannot be disassembled and supplied.


Brake plate
Brake shoe
REB-187
Brake plate spring
RBH-366
EW 2ϕ
Brake shoe
REB-187
*
Take-up reel base full assembly
RXA-844
*
Supply reel base full assembly
RXA-845
Back tension lever spring
RSH-365
Back tension lever
RNF-169
Back tension rubber
REB-226
EW 3ϕ
PSA 2.6x5
PSA 2.6x5
Chassis
Brake plate release lever
RNK-357
PT 3x6
Auto start lever spring
RBH-228
PSA 2.6x4
Cord clamper
EW 2ϕ
Motor bracket
PSA 2.6x4
FW 2.6ϕ
PSA 2.6x6
Stopper
REB-153
HS 2x2.5
Solenoid C
RXP-030
Diode
SIB01-01
Motor (F.F.)
RXM-019
Pulley (F.F. motor)
RLA-743
*
F.F. idler full assembly
RXA-581
Sensing belt
REB-232
Head base release spring
RBH-371
Pulley assembly
RXA-842
EW 1.5ϕ
Oil stopper washer
RBF-037
Release bracket
RNF-180
Take-up belt
REB-228
EW 2ϕ
F.F. lever
RNK-359
F.F. lever spring
RBH-368
Head base drive arm assembly
EW 4ϕ
Spring
RBH-372
PSA 2.6x4
*
Take-up idler arm fulley assembly
RXA-857
Metal holder assembly
RXA-835
PSA 2.6x5
Take-up arm spring
RBH-367
EW 2ϕ
Polyethylene washer
3.2ϕ x 6ϕ x 0.5t
Spring
RBK-107
Motor assembly
See page 31
PSA 3x6
Spring A
RBH-363
Spring A
RBH-363
Capstan B assembly
RXA-834
*
Half holder bracket assembly
RXA-840
Capstan belt
REB-230
PSA 3x6
*
Half holder bracket assembly
RXA-840
PSA 2.6x4
Spring B
RBH-364
Capstan A assembly
RXA-833
PSA 2.6x4
Spring B
RBH-364
PSA 3x6

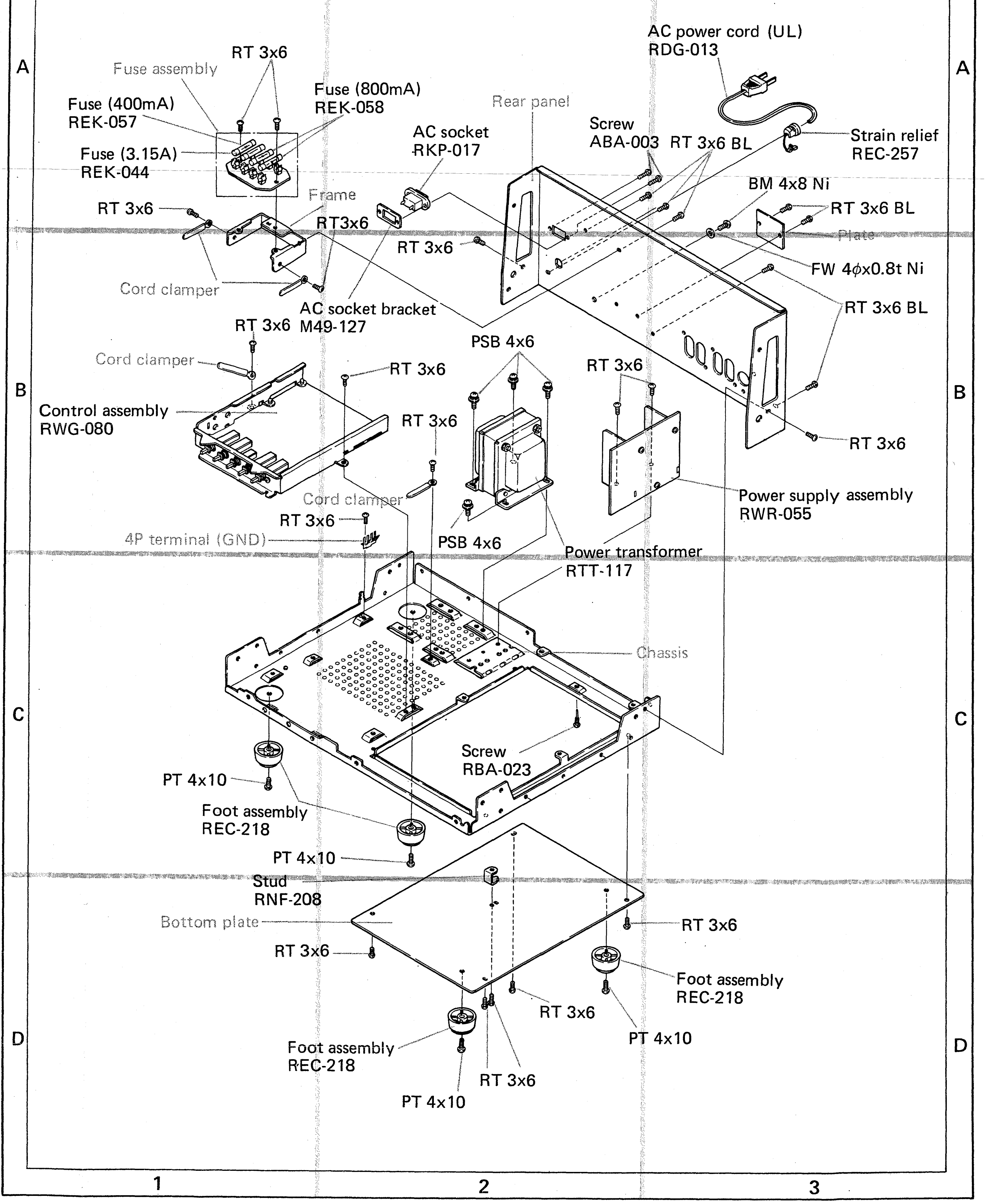
Front Panel View

NOTE:
Parts indicated in green type cannot be supplied.


1
2
3
A
B
C
D
Half cover
RNK-371
CS type stopper ring 2ϕ
Half cover panel assembly
RXX-213
Knob (PITCH CONTROL)
RAA-187
RT 3x8
FW 3ϕ x 8ϕ x 0.5t
Hexagon socket
screw 3x6 Ni
PSB 3x8
Front panel
Mask
RED-112
PSB 3x8
RT 3x8
FW 3ϕ x 8ϕ x 0.5t
Front panel assembly
PXX-212
PSB 3x8
CS type stopper ring 16ϕ
Lens
RNK-362
Knob
RAA-188
Guide L
RNK-365
Marker spring
RBK-105
Mask
RED-112
Maker spacer
RBF-026
Guide R
RNK-366
Knob B
RAA-191
Lever knob B assembly (POWER)
RAA-184
Lever knob B assembly (PAUSE)
RAA-184
Lever escutcheon
RNK-368
Marker spacer
RBF-026
Lever knob A assembly
RAA-180
Knob A assembly
RAA-189
Marker
RNK-206
Lever knob B assembly (MONITOR)
RAA-184
CS type stopper ring 2ϕ
Mask
RED-131
Screw
RBA-025
Head cover assembly
RXX-214
Nylon washer
4.7ϕ x 7ϕ x 0.2t
Screw
RBA-025
CS type stopper ring 2ϕ
Click spring
RBK-110
Steel ball
REF-014
Hexagon socket
screw 3x6 Ni
Escutcheon assembly
RXX-126
Escutcheon panel assembly
RXX-215

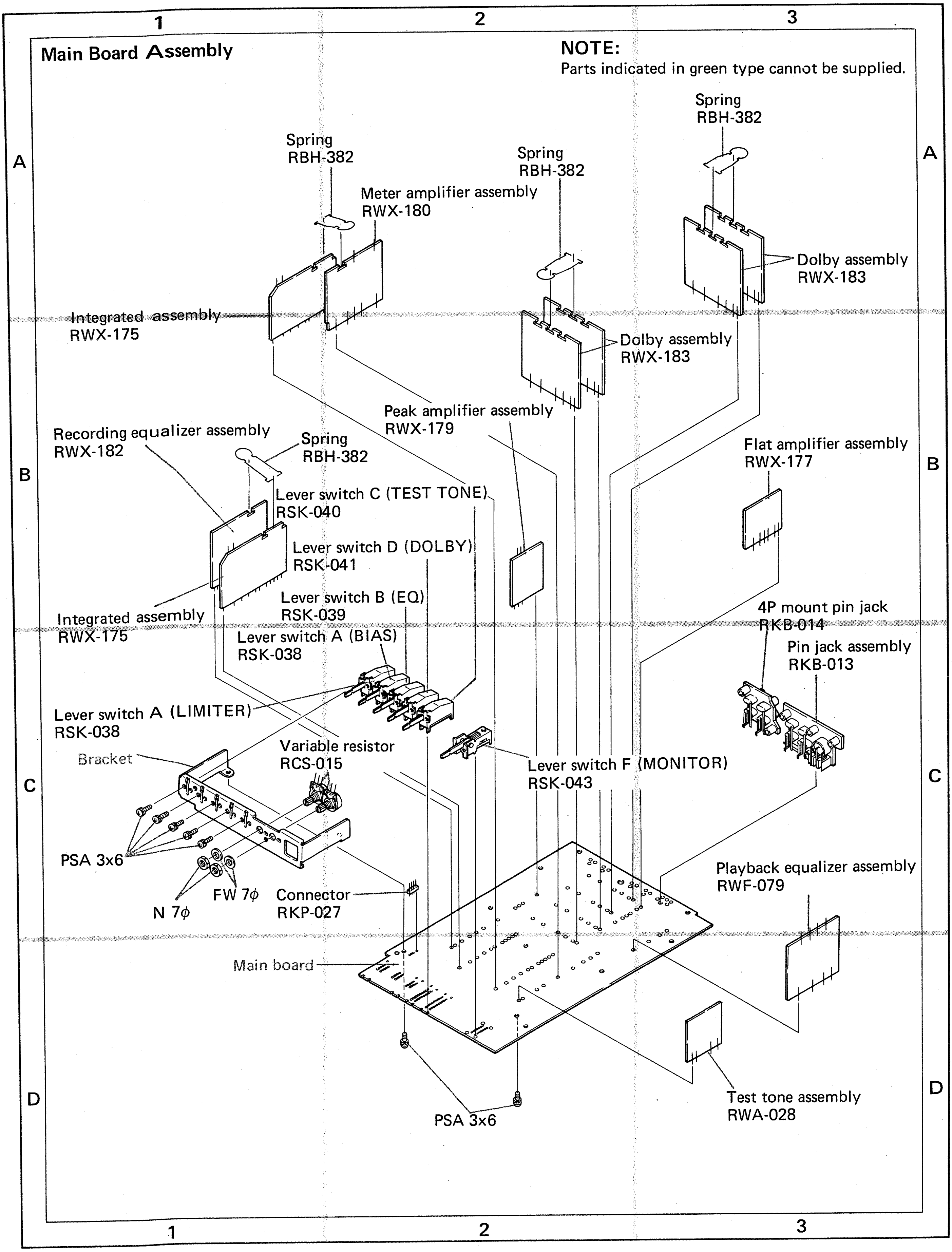
Main Chassis and Rear Panel

NOTE:
Parts indicated in green type cannot be supplied.


1
2
3
A
B
C
D
AC power cord (UL)
RDG-013
RT 3x6
Fuse assembly
Fuse (800mA)
REK-058
Fuse (400mA)
REK-057
Rear panel
Screw
ABA-003
RT 3x6 BL
Strain relief
REC-257
AC socket
RKP-017
Fuse (3.15A)
REK-044
Frame
BM 4x8 Ni
RT 3x6 BL
RT 3x6
RT3x6
Plate
RT 3x6
FW 4ϕx0.8t Ni
Cord clamper
AC socket bracket
RT 3x6 BL
RT 3x6
M49-127
PSB 4x6
Cord clamper
RT 3x6
RT 3x6
Control assembly
RWG-080
RT 3x6
RT 3x6
Cord clamper
Power supply assembly
RWR-055
RT 3x6
4P terminal (GND)
PSB 4x6
Power transformer
RTT-117
Chassis
Screw
RBA-023
PT 4x10
Foot assembly
REC-218
PT 4x10
Stud
RNF-208
Bottom plate
RT 3x6
RT 3x6
Foot assembly
REC-218
RT 3x6
PT 4x10
Foot assembly
REC-218
RT 3x6
PT 4x10

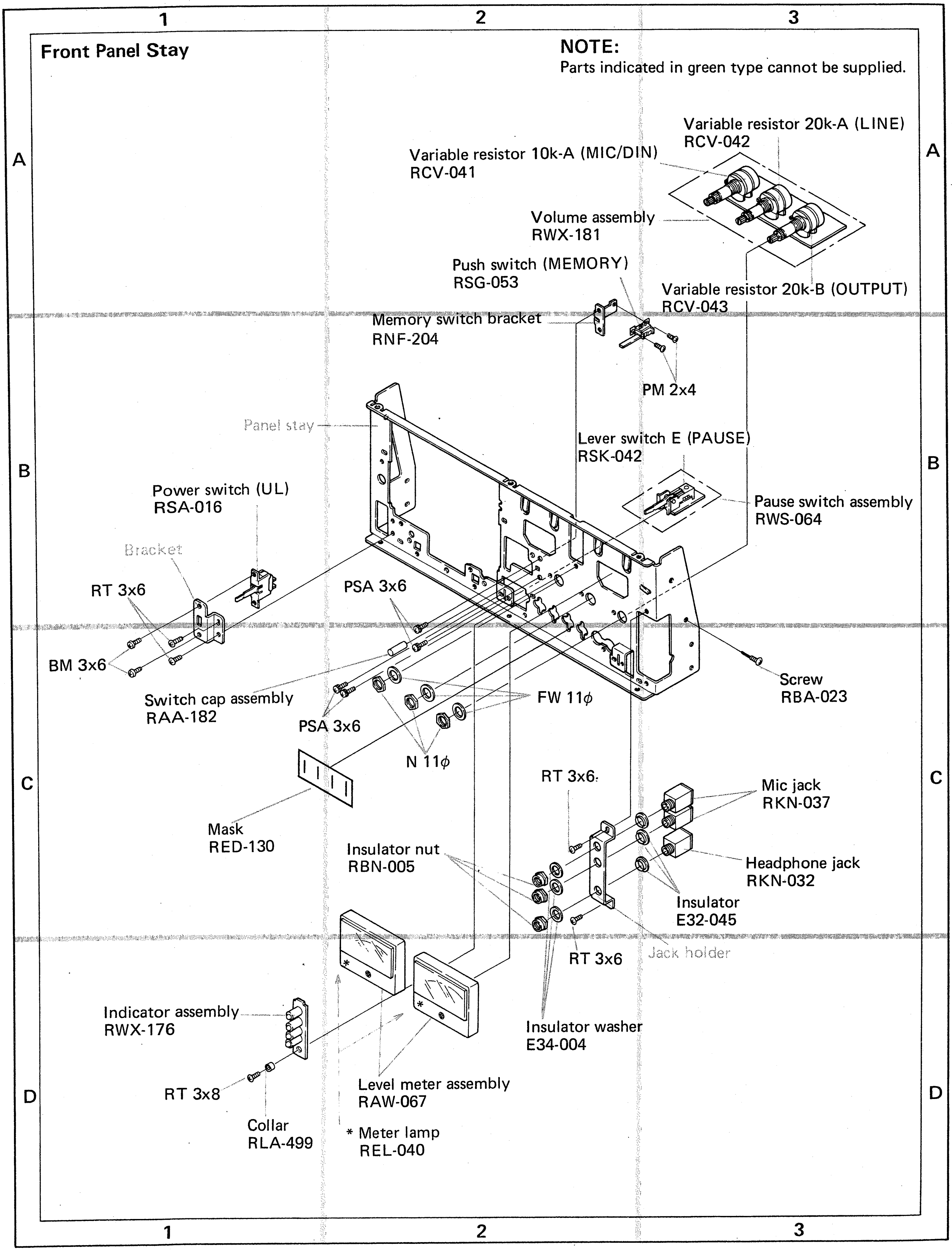
Main Board Assembly

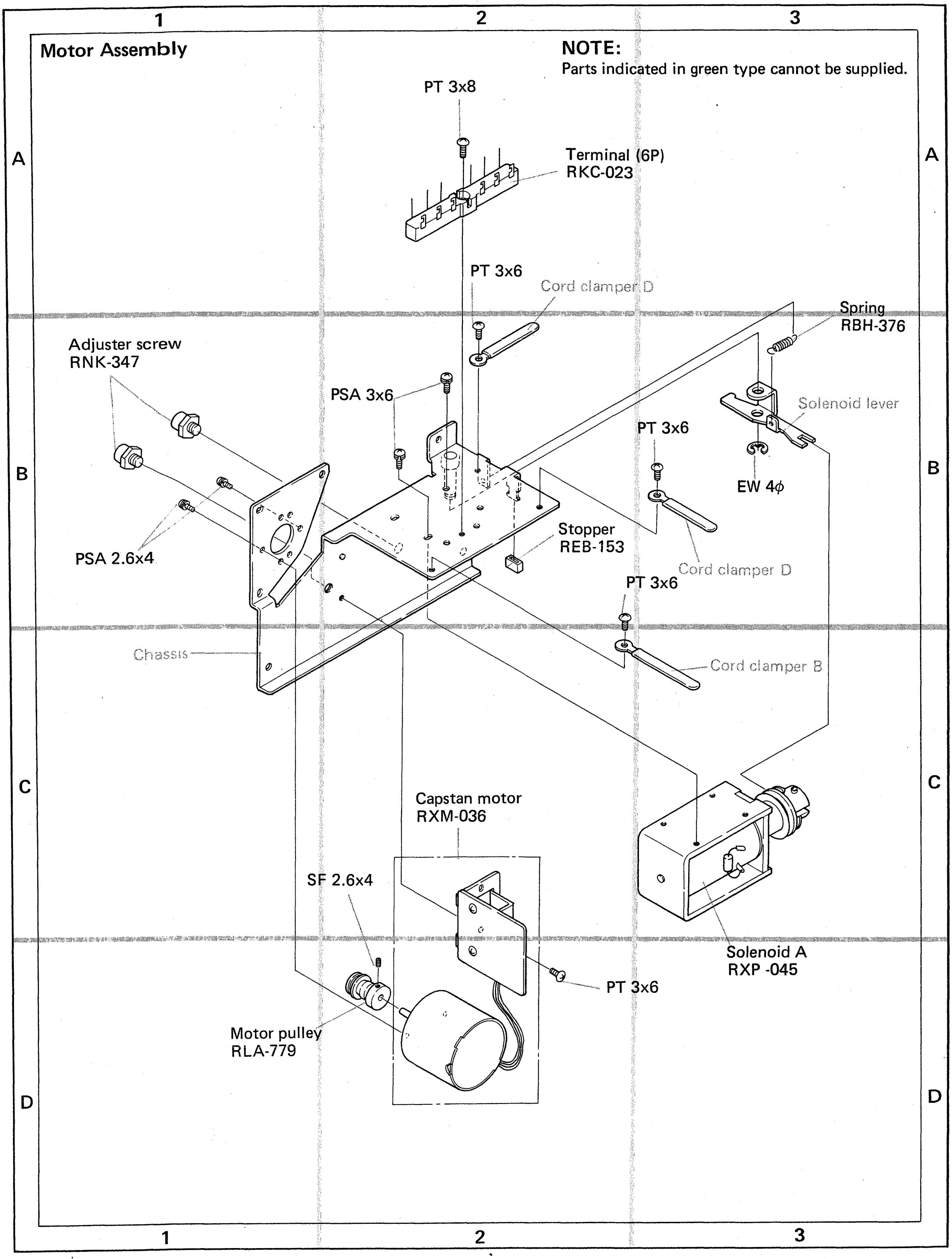
NOTE:
Parts indicated in green type cannot be supplied.


1
2
3
A
B
C
D
Spring
RBH-382
Meter amplifier assembly
RWX-180
Spring
RBH-382
Spring
RBH-382
Dolby assembly
RWX-183
Integrated assembly
RWX-175
Dolby assembly
RWX-183
Peak amplifier assembly
RWX-179
Recording equalizer assembly
RWX-182
Spring
RBH-382
Flat amplifier assembly
RWX-177
Lever switch C (TEST TONE)
RSK-040
Lever switch D (DOLBY)
RSK-041
Lever switch B (EQ)
RSK-039
4P mount pin jack
RKB-014
Integrated assembly
RWX-175
Lever switch A (BIAS)
RSK-038
Pin jack assembly
RKB-013
Lever switch A (LIMITER)
RSK-038
Variable resistor
RCS-015
Bracket
Lever switch F (MONITOR)
RSK-043
PSA 3x6
FW 7φ
N 7φ
Connector
RKP-027
Playback equalizer assembly
RWF-079
Main board
Test tone assembly
RWA-028
PSA 3x6

Front Panel Stay

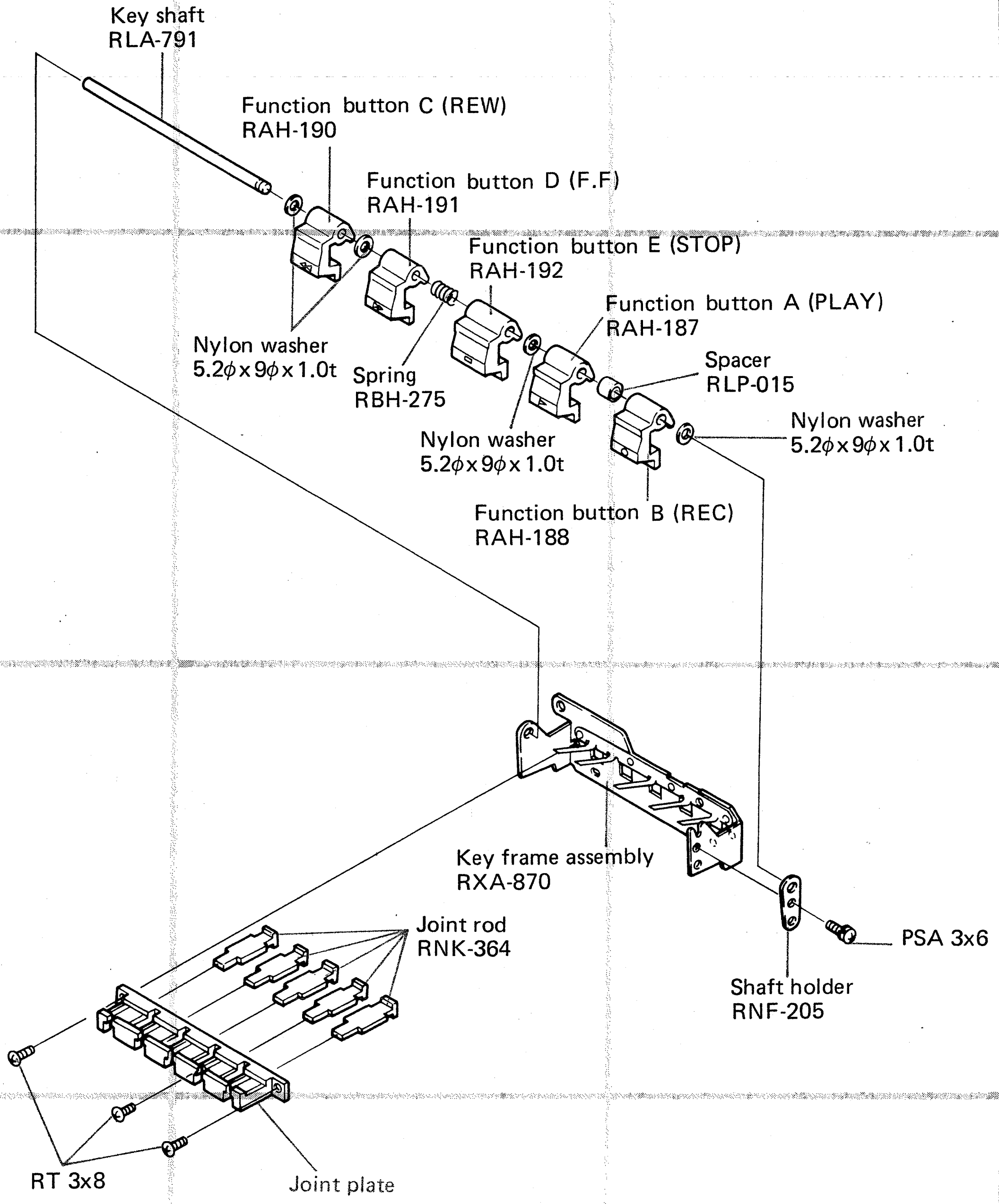
NOTE:
Parts indicated in green type cannot be supplied.


1
2
3
A
B
C
D
Variable resistor 20k-A (LINE)
RCV-042
Variable resistor 10k-A (MIC/DIN)
RCV-041
Volume assembly
RWX-181
Push switch (MEMORY)
RSG-053
Variable resistor 20k-B (OUTPUT)
RCV-043
Memory switch bracket
RNF-204
PM 2x4
Panel stay
Lever switch E (PAUSE)
RSK-042
Power switch (UL)
RSA-016
Pause switch assembly
RWS-064
Bracket
RT 3x6
PSA 3x6
BM 3x6
Screw
RBA-023
Switch cap assembly
RAA-182
FW 11ϕ
PSA 3x6
N 11ϕ
RT 3x6
Mic jack
RKN-037
Mask
RED-130
Insulator nut
RBN-005
Headphone jack
RKN-032
Insulator
E32-045
RT 3x6
Jack holder
Indicator assembly
RWX-176
Insulator washer
E34-004
RT 3x8
Level meter assembly
RAW-067
Collar
RLA-499
* Meter lamp
REL-040


1
2
3
A
B
C
D
Motor Assembly
NOTE:
Parts indicated in green type cannot be supplied.
PT 3x8
Terminal (6P)
RKC-023
PT 3x6
Cord clamper D
Spring
RBH-376
Adjuster screw
RNK-347
PSA 3x6
Solenoid lever
PT 3x6
EW 4ϕ
PSA 2.6x4
Stopper
REB-153
Cord clamper D
PT 3x6
Chassis
Cord clamper B
Capstan motor
RXM-036
SF 2.6x4
Solenoid A
RXP -045
PT 3x6
Motor pulley
RLA-779

Function Button Assembly

NOTE:
Parts indicated in green type cannot be supplied.


Key shaft
RLA-791
Function button C (REW)
RAH-190
Function button D (F.F)
RAH-191
Function button E (STOP)
RAH-192
Function button A (PLAY)
RAH-187
Spacer
RLP-015
Nylon washer
5.2ϕx9ϕx1.0t
Spring
RBH-275
Nylon washer
5.2ϕx9ϕx1.0t
Nylon washer
5.2ϕx9ϕx1.0t
Function button B (REC)
RAH-188
Key frame assembly
RXA-870
Joint rod
RNK-364
PSA 3x6
Shaft holder
RNF-205
RT 3x8
Joint plate

9. SCHEMATIC DIAGRAMS, P.C. BOARD PATTERNS AND PARTS LIST

9.1 MISCELLANEOUS PARTS LIST

NOTE:
- *Capacitors: in µF unless otherwise noted p:pF*
- *Resistors: in Ω, ¼W unless otherwise noted k:kΩ, M:MΩ*

SWITCHES

Symbol	Part No.	Description
	RSA-016	Power switch
	RSG-053	Push switch

TRANSFORMER

Symbol	Part No.	Description
	RTT-117	Power transformer

CAPACITORS

Symbol	Part No.	Description		
C001	CKDYF 473Z 50	Ceramic	0.047	50V
C002	CKDYF 473Z 50	Ceramic	0.047	50V
C003	CKDYF 473Z 50	Ceramic	0.047	50V
C004	CKDYF 473Z 50	Ceramic	0.047	50V

RESISTORS

Symbol	Part No.	Description	
R001	RD¼PS 222J	Carbon film	2.2k
R002	RD¼PS 222J	Carbon film	2.2k

ASSEMBLIES

Symbol	Part No.	Description
	RWX-178	Main board assembly
	RWX-181	Volume assembly
	RWX-176	Indicator assembly
	RWR-055	Power supply assembly
	RWS-064	Pause switch assembly
	RWG-080	Control assembly

OTHERS

Symbol	Part No.	Description
	RWX-109	Spark killer (KU)
	RWX-150	Spark killer (KC)
	RDG-013	Power cord
	RKN-037	Mic jack
	RKN-032	Headphone jack

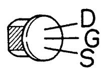
Service information will be furnished whenever necessary and you are requested to amend parts number in this parts list.

List of Changed Parts for Factory Modification

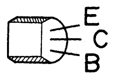
Symbol	Part No.	Description

9.2 EXTERNAL APPEARANCE OF TRANSISTORS AND ICS

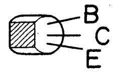
2SK30AD



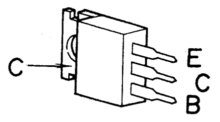
2SA628
2SC1312
2SC711
2SC620



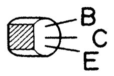
2SC1209



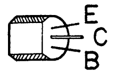
2SD526
2SD234
2SC1419
2SC790



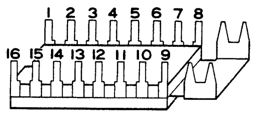
2SC828



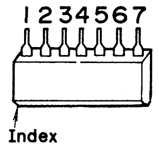
2SB525



PA4001

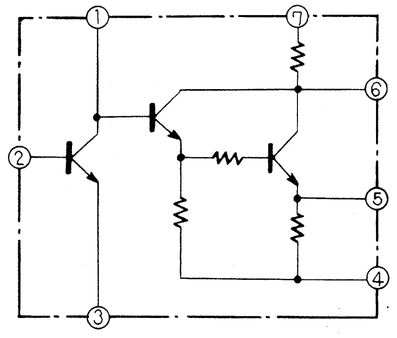


TA7129P

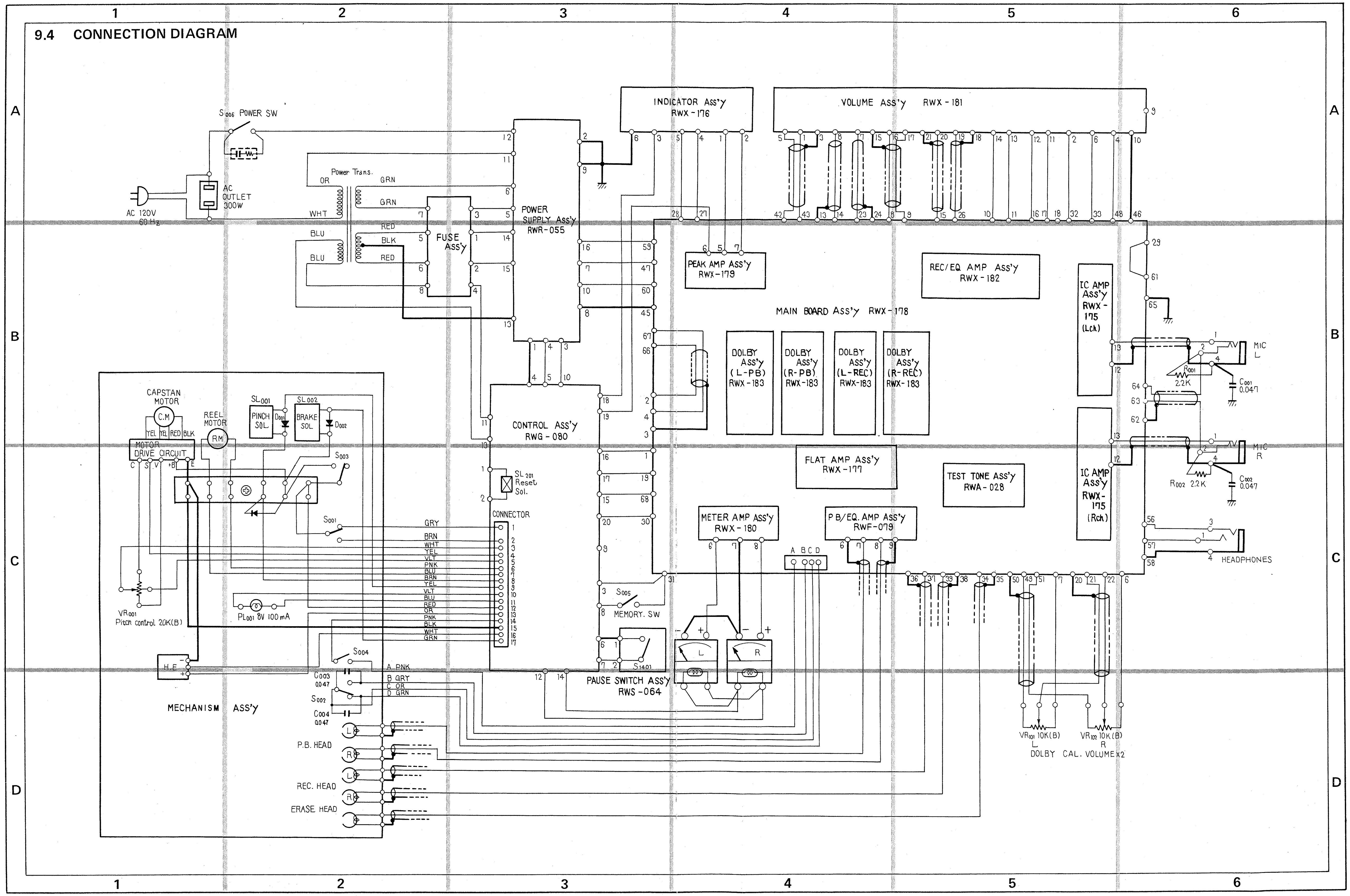


9.3 CIRCUIT DIAGRAM OF IC

TA7129P

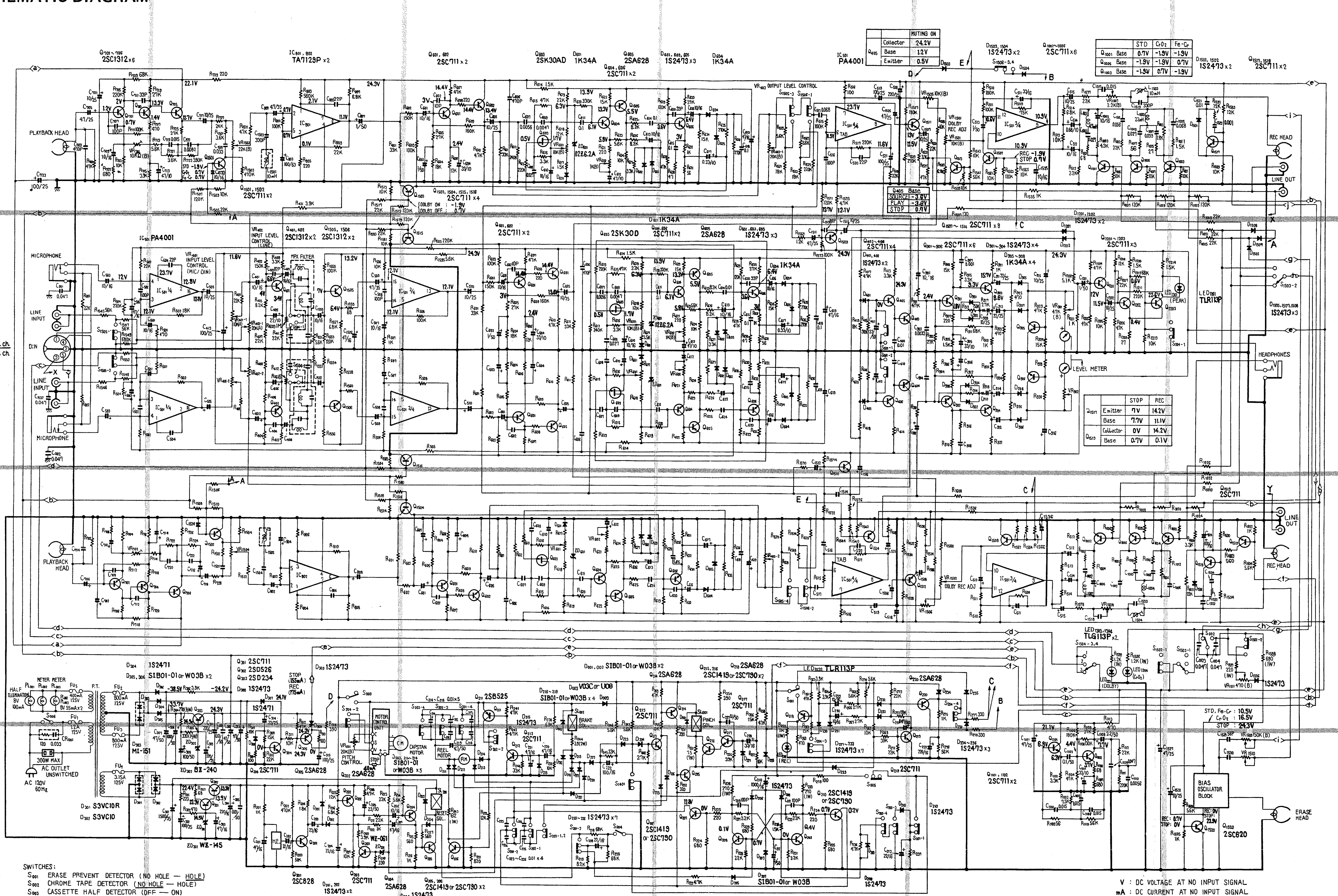


9.4 CONNECTION DIAGRAM



1
2
3
4
5
6
A
B
C
D
S005 POWER SW
AC 120V 60Hz
AC OUTLET 300W
Power Trans.
OR
GRN
WHT
BLU
RED
BLK
FUSE Ass'y
POWER SUPPLY Ass'y RWR-055
INDICATOR Ass'y RWX-176
VOLUME Ass'y RWX-181
PEAK AMP Ass'y RWX-179
REC/EQ AMP Ass'y RWX-182
MAIN BOARD Ass'y RWX-178
IC AMP Ass'y RWX-175 (Lch)
IC AMP Ass'y RWX-175 (Rch)
DOLBY Ass'y (L-PB) RWX-183
DOLBY Ass'y (R-PB) RWX-183
DOLBY Ass'y (L-REC) RWX-183
DOLBY Ass'y (R-REC) RWX-183
FLAT AMP Ass'y RWX-177
TEST TONE Ass'y RWA-028
METER AMP Ass'y RWX-180
P B/EQ. AMP Ass'y RWF-079
CONTROL Ass'y RWG-080
SL201 Reset Sol.
CONNECTOR
S005 MEMORY. SW
PAUSE SWITCH Ass'y RWS-064
S1401
MIC L
MIC R
R001 2.2K
R002 2.2K
C001 0.047
C002 0.047
HEADPHONES
CAPSTAN MOTOR
C.M
REEL MOTOR
RM
SL001 PINCH SOL.
D001
SL002 BRAKE SOL.
D002
MOTOR DRIVE CIRCUIT
YEL YEL RED BLK
S003
S001
VR001 Pitch control 20K(B)
PL001 8V 100mA
S004
H.E
C003 0.047
S002
C004 0.047
A PNK
B GRY
C OR
D GRN
P.B. HEAD
REC. HEAD
ERASE HEAD
MECHANISM Ass'y
GRY
BRN
WHT
YEL
VLT
PNK
BLU
BRN
YEL
VLT
BLU
RED
OR
PNK
BLK
WHT
GRN
A B C D
L
R
VR101 10K(B) L
VR102 10K(B) R
DOLBY CAL. VOLUME x2

9.5 SCHEMATIC DIAGRAM


PLAYBACK HEAD
MICROPHONE
LINE INPUT
DIN
L ch
R ch
MICROPHONE
LINE INPUT
PLAYBACK HEAD
REC HEAD
LINE OUT
HEADPHONES
LEVEL METER
LED TLR113P (PEAK)
LED TLG113P x2
LED TLR113P
BIAS OSCILLATOR BLOCK
ERASE HEAD
CAPSTAN MOTOR
REEL MOTOR
MOTOR CONTROL UNIT
PITCH CONTROL
BRAKE SOL.
PINCH SOL.
RESET SOL.
AC OUTLET UNSWITCHED
AC 120V 60Hz
METER ILLUMINATION
P.T.
IC501 PA4001
IC601, 602 TA7123P x2
IC551 PA4001
MUTING ON
Collector 24.2V
Base 12V
Emitter 0.5V
STD
CrO2
Fe-Cr
STOP
REC
A
B
C
D
1
2
3
4
5
6

SWITCHES:
S001 ERASE PREVENT DETECTOR (NO HOLE — HOLE)
S002 CHROME TAPE DETECTOR (NO HOLE — HOLE)
S003 CASSETTE HALF DETECTOR (OFF — ON)
S004 TAPE COUNTER (OFF — ON)
S005 MEMORY STOP/PLAY (OFF — ON)
S006 POWER (OFF — ON)

S201 REW (OFF — ON)
S202 F.F (OFF — ON)
S203 PLAY (OFF — ON)

S204 REC (OFF — ON)
S1401 PAUSE (OFF — ON)
S1501 LIMITER (OFF — ON)

S1502 BIAS (STD / Fe-Cr — CrO2)
S1503 EQ (CrO2 — STD — Fe-Cr)
S1504 DOLBY NR / MPX FILTER (ON/ON — OFF/OFF — ON/OFF)

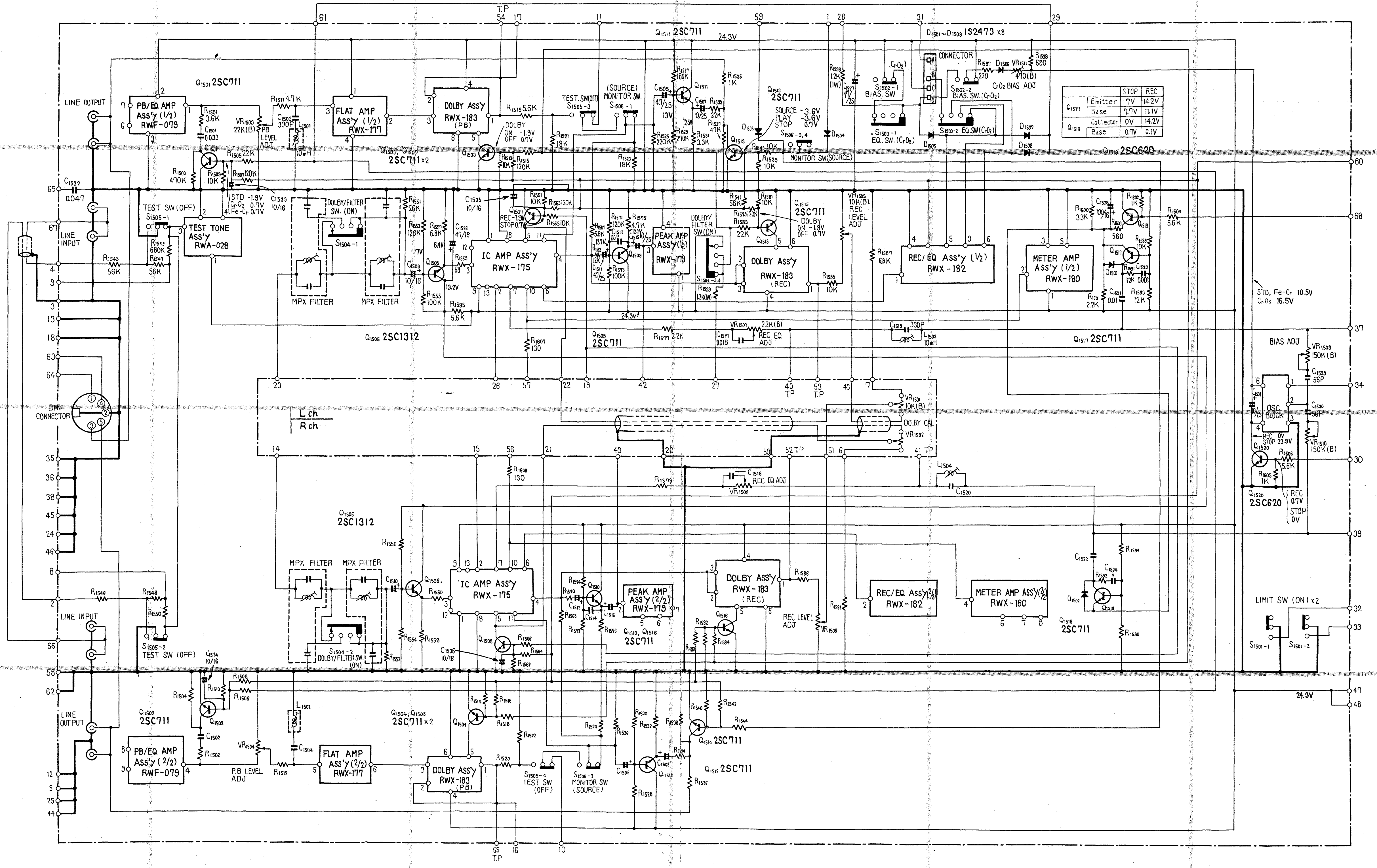
S1505 TEST 400Hz (OFF — ON)
S1506 MONITOR (TAPE — SOURCE)

RESISTORS:
IN OHM 1/4W ±5% TOLERANCE UNLESS OTHERWISE NOTED K : kΩ M : MΩ

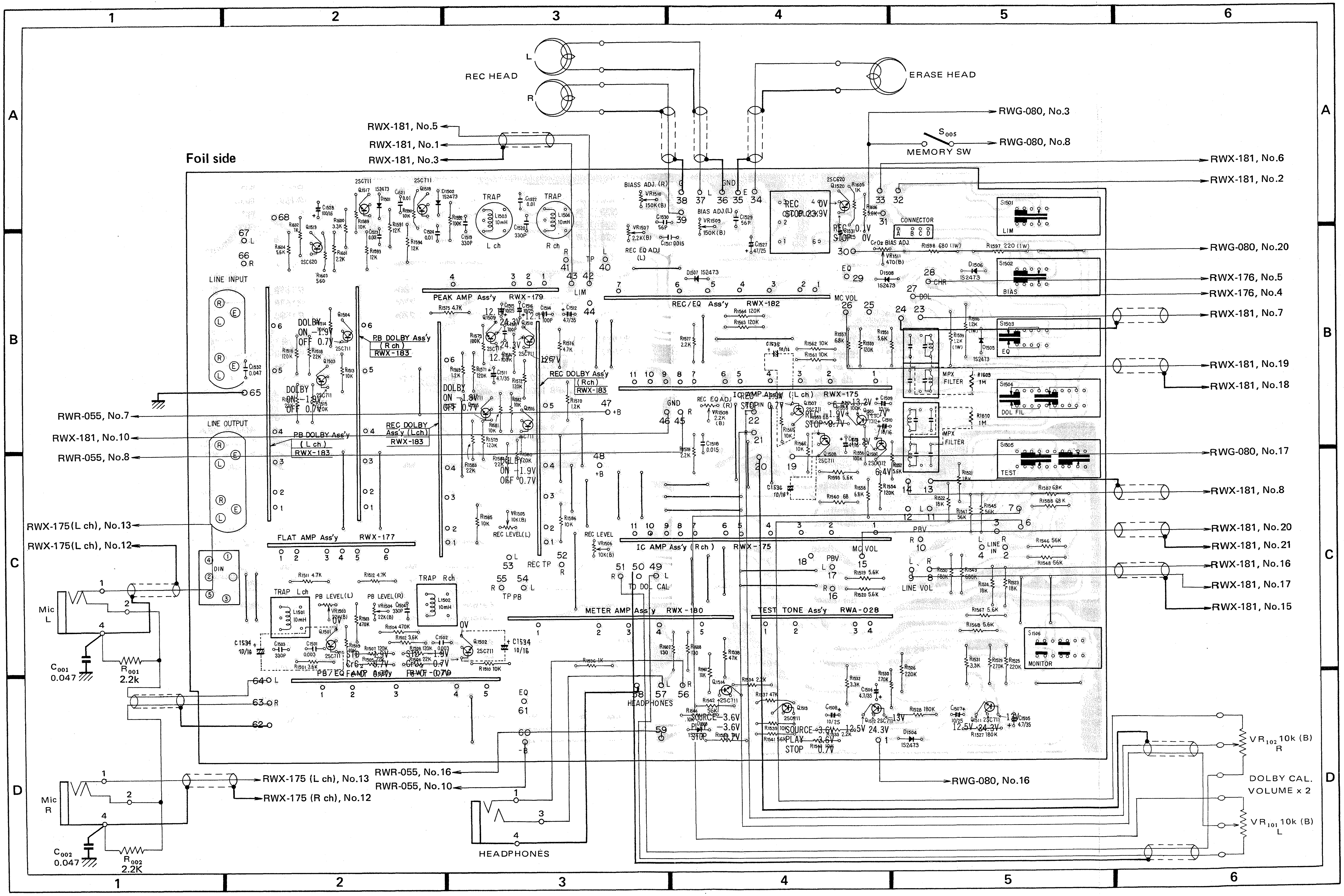
CAPACITORS;
IN μF UNLESS OTHERWISE NOTED
P : pF

V : DC VOLTAGE AT NO INPUT SIGNAL
mA : DC CURRENT AT NO INPUT SIGNAL
This is the basic schematic diagram, but the actual circuit may vary due to improvoment in design.

9.6 MAIN BOARD ASSEMBLY (RWX-178)


LINE OUTPUT
LINE INPUT
DIN CONNECTOR
PB/EQ AMP Ass'y (1/2) RWF-079
PB/EQ AMP Ass'y (2/2) RWF-079
FLAT AMP Ass'y (1/2) RWX-177
FLAT AMP Ass'y (2/2) RWX-177
DOLBY Ass'y RWX-183 (PB)
DOLBY Ass'y RWX-183 (REC)
TEST TONE Ass'y RWA-028
IC AMP Ass'y RWX-175
PEAK AMP Ass'y (1/2) RWX-179
PEAK AMP Ass'y (2/2) RWX-179
REC/EQ Ass'y (1/2) RWX-182
REC/EQ Ass'y (2/2) RWX-182
METER AMP Ass'y (1/2) RWX-180
METER AMP Ass'y (2/2) RWX-180
OSC BLOCK
MPX FILTER
TEST SW (OFF)
DOLBY/FILTER SW (ON)
MONITOR SW (SOURCE)
BIAS SW
EQ. SW (CrO2)
CONNECTOR
CrO2 BIAS ADJ
BIAS ADJ
REC LEVEL ADJ
REC EQ ADJ
PB LEVEL ADJ
DOLBY CAL
LIMIT SW (ON) x2
Q1501 2SC711
Q1502 2SC711
Q1503, Q1507 2SC711 x2
Q1504, Q1508 2SC711 x2
Q1505 2SC1312
Q1506 2SC1312
Q1509 2SC711
Q1510, Q1516 2SC711
Q1511 2SC711
Q1512 2SC711
Q1514 2SC711
Q1515 2SC711
Q1517 2SC711
Q1518 2SC711
Q1519 2SC620
Q1520 2SC620
D1501~D1508 1S2473 x8
24.3V
STD. Fe-Cr 10.5V CrO2 16.5V
L ch
R ch
T.P

		STOP	REC
Q1517	Emitter	7V	14.2V
	Base	7.7V	11.1V
Q1519	Collector	0V	14.2V
	Base	0.7V	0.1V


Foil side
REC HEAD
L
R
ERASE HEAD
MEMORY SW
S005
RWX-181, No.5
RWX-181, No.1
RWX-181, No.3
RWG-080, No.3
RWG-080, No.8
RWX-181, No.6
RWX-181, No.2
RWG-080, No.20
RWX-176, No.5
RWX-176, No.4
RWX-181, No.7
RWX-181, No.19
RWX-181, No.18
RWG-080, No.17
RWX-181, No.8
RWX-181, No.20
RWX-181, No.21
RWX-181, No.16
RWX-181, No.17
RWX-181, No.15
RWR-055, No.7
RWX-181, No.10
RWR-055, No.8
RWX-175(L ch), No.13
RWX-175(L ch), No.12
RWX-175 (L ch), No.13
RWX-175 (R ch), No.12
RWR-055, No.16
RWR-055, No.10
RWG-080, No.16
LINE INPUT
LINE OUTPUT
DIN
Mic L
Mic R
C001 0.047
R001 2.2k
C002 0.047
R002 2.2K
HEADPHONES
DOLBY CAL. VOLUME x 2
VR102 10k (B) R
VR101 10k (B) L
PEAK AMP Ass'y RWX-179
REC/EQ Ass'y RWX-182
PB DOLBY Ass'y (R ch) RWX-183
PB DOLBY Ass'y (L ch) RWX-183
REC DOLBY Ass'y (R ch) RWX-183
REC DOLBY Ass'y (L ch) RWX-183
FLAT AMP Ass'y RWX-177
IC AMP Ass'y (L ch) RWX-175
IC AMP Ass'y (R ch) RWX-175
METER AMP Ass'y RWX-180
TEST TONE Ass'y RWA-028
PB EQ AMP Ass'y RWX-178
TRAP
TRAP L ch
TRAP R ch
BIAS ADJ. (R)
BIAS ADJ. (L)
REC EQ ADJ (L)
REC EQ ADJ (R)
CrO2 BIAS ADJ.
CONNECTOR
S1501 LIM
S1502 BIAS
S1503 EQ
S1504 DOL FIL
S1505 TEST
S1506 MONITOR
MPX FILTER
PB LEVEL (L)
PB LEVEL (R)
REC LEVEL (L)
REC LEVEL
MC VOL
LINE VOL
LINE IN
PBV
REC TP
TP PB
LIM
CHR
DOL
EQ
GND
+B
-B
DOLBY ON -1.9V OFF 0.7V
SOURCE -3.6V
PLAY -3.6V
STOP 0.7V
24.3V
12.5V

Parts List of Main Board Assembly (RWX-178)

ASSEMBLIES

Symbol	Part No.	Description
	RWX-177	Flat amplifier assembly
	RWA-028	Test tone assembly
	RWX-179	Peak amplifier assembly
	RWF-079	Playback equalizer assembly
	RWX-180	Meter amplifier assembly
	RWX-175	IC amplifier assembly
	RWX-182	Recording equalizer assembly
	RWX-183	Dolby assembly

SWITCHES

Symbol	Part No.	Description
S1501	RSK-038	Lever Switch A
S1502	RSK-038	Lever Switch A
S1503	RSK-039	Lever Switch B
S1504	RSK-041	Lever Switch D
S1505	RSK-040	Lever Switch C
S1506	RSK-043	Lever Switch F

COILS

Symbol	Part No.	Description
L1501	RTF-024	Trap Coil
L1502	RTF-024	Trap Coil
L1503	RTF-024	Trap Coil
L1504	RTF-024	Trap Coil
	RTF-034	MPX Coil
	RTF-035	MPX Coil

CAPACITORS

Symbol	Part No.	Description		
C1501	CQMA 333K 50	Mylar	0.033	50V
C1502	CQMA 333K 50	Mylar	0.033	50V
C1503	RCE-008	Styrol	330p	50V
C1504	RCE-008	Styrol	330p	50V
C1505	CEA 4R7P 35	Electrolytic	4.7	35V
C1506	CEA 4R7P 35	Electrolytic	4.7	35V
C1507	CEA 100P 25	Electrolytic	10	25V
C1508	CEA 100P 25	Electrolytic	10	25V
C1509	CEA 100P 16	Electrolytic	10	16V
C1510	CEA 100P 16	Electrolytic	10	16V
C1511	CEA 4R7P 35	Electrolytic	4.7	35V
C1512	CEA 4R7P 35	Electrolytic	4.7	35V
C1513	CCDSL 101K 50	Ceramic	100p	50V
C1514	CCDSL 101K 50	Ceramic	100p	50V
C1515	CEA 100P 25	Electrolytic	10	25V
C1516	CEA 100P 25	Electrolytic	10	25V
C1517	CQMA 153K 50	Mylar	0.015	50V
C1518	CQMA 153K 50	Mylar	0.015	50V
C1519	RCE-008	Styrol	330p	50V
C1520	RCE-008	Styrol	330p	50V
C1521	CQMA 103K 50	Mylar	0.01	50V
C1522	CQMA 103K 50	Mylar	0.01	50V
C1523	CQMA 102K 50	Mylar	0.001	50V
C1524	CQMA 102K 50	Mylar	0.001	50V
C1526	CEA 470P 16	Electrolytic	47	16V
C1527	CEA 470P 25	Electrolytic	47	25V
C1528	CEA 101P 16	Electrolytic	100	16V
C1529	RCE-004	Styrol	56p	50V
C1530	RCE-004	Styrol	56p	50V
C1531	CEA 100P 25	Electrolytic	10	25V
C1532	CKDYF 473Z 50	Ceramic	0.047	50V
C1533	CEA 100P 16	Electrolytic	10	16V
C1534	CEA 100P 16	Electrolytic	10	16V
C1535	CEA 100P 16	Electrolytic	10	16V
C1536	CEA 100P 16	Electrolytic	10	16V

RESISTORS

Symbol	Part No.	Description		
VR1501	RCS-015	Variable resistor	10k-B	
VR1502	RCS-015	Variable resistor	10k-B	
VR1503	C92-857	Semifixed	22k-B	
VR1504	C92-857	Semifixed	22k-B	
VR1505	C92-049	Semifixed	10k-B	
VR1506	C92-049	Semifixed	10k-B	
VR1507	C92-401	Semifixed	2.2k-B	
VR1508	C92-401	Semifixed	2.2k-B	
VR1509	C92-860	Semifixed	150k-B	
VR1510	C92-860	Semifixed	150k-B	
VR1511	RCP-022	Metal glaze semifixed 470-B		
R1501	RD¼PS 362J	Carbon film	3.6k	
R1502	RD¼PS 362J	Carbon film	3.6k	
R1503	RD¼PS 474J	Carbon film	470k	
R1504	RD¼PS 474J	Carbon film	470k	
R1505	RD¼PS 223J	Carbon film	22k	
R1506	RD¼PS 223J	Carbon film	22k	
R1507	RD¼PS 124J	Carbon film	120k	
R1508	RD¼PS 124J	Carbon film	120k	
R1509	RD¼PS 103J	Carbon film	10k	
R1510	RD¼PS 103J	Carbon film	10k	
R1511	RD¼PS 472J	Carbon film	4.7k	
R1512	RD¼PS 472J	Carbon film	4.7k	
R1513	RD¼PS 103J	Carbon film	10k	
R1514	RD¼PS 103J	Carbon film	10k	
R1515	RD¼PS 124J	Carbon film	120k	
R1516	RD¼PS 124J	Carbon film	120k	
R1517	RD¼PS 223J	Carbon film	22k	
R1518	RD¼PS 223J	Carbon film	22k	
R1519	RD¼PS 562J	Carbon film	5.6k	
R1520	RD¼PS 562J	Carbon film	5.6k	
R1521	RD¼PS 183J	Carbon film	18k	
R1522	RD¼PS 183J	Carbon film	18k	
R1523	RD¼PS 183J	Carbon film	18k	
R1524	RD¼PS 183J	Carbon film	18k	
R1525	RD¼PS 224J	Carbon film	220k	
R1526	RD¼PS 224J	Carbon film	220k	
R1527	RD¼PS 184J	Carbon film	180k	
R1528	RD¼PS 184J	Carbon film	180k	
R1529	RD¼PS 274J	Carbon film	270k	
R1530	RD¼PS 274J	Carbon film	270k	
R1531	RD¼PS 332J	Carbon film	3.3k	
R1532	RD¼PS 332J	Carbon film	3.3k	
R1533	RD¼PS 222J	Carbon film	2.2k	
R1534	RD¼PS 222J	Carbon film	2.2k	
R1535	RD¼PS 102J	Carbon film	1k	
R1536	RD¼PS 102J	Carbon film	1k	
R1537	RD¼PS 473J	Carbon film	47k	
R1538	RD¼PS 473J	Carbon film	47k	
R1539	RD¼PS 103J	Carbon film	10k	
R1540	RD¼PS 103J	Carbon film	10k	
R1541	RD¼PS 563J	Carbon film	56k	
R1542	RD¼PS 563J	Carbon film	56k	
R1543	RD¼PS 103J	Carbon film	10k	
R1544	RD¼PS 103J	Carbon film	10k	
R1545	RD¼PS 563J	Carbon film	56k	
R1546	RD¼PS 563J	Carbon film	56k	
R1547	RD¼PS 563J	Carbon film	56k	
R1548	RD¼PS 563J	Carbon film	56k	
R1549	RD¼PS 684J	Carbon film	680k	
R1550	RD¼PS 684J	Carbon film	680k	
R1551	RD¼PS 562J	Carbon film	5.6k	
R1552	RD¼PS 562J	Carbon film	5.6k	
R1553	RD¼PS 124J	Carbon film	120k	
R1554	RD¼PS 124J	Carbon film	120k	
R1555	RD¼PS 104J	Carbon film	100k	
R1556	RD¼PS 104J	Carbon film	100k	
R1557	RD¼PS 682J	Carbon film	6.8k	
R1558	RD¼PS 682J	Carbon film	6.8k	
R1559	RD¼PS 680J	Carbon film	68	
R1560	RD¼PS 680J	Carbon film	68	
R1561	RD¼PS 103J	Carbon film	10k	
R1562	RD¼PS 103J	Carbon film	10k	
R1563	RD¼PS 124J	Carbon film	120k	
R1564	RD¼PS 124J	Carbon film	120k	
R1565	RD¼PS 103J	Carbon film	10k	
R1566	RD¼PS 103J	Carbon film	10k	
R1567	RD¼PS 562J	Carbon film	5.6k	
R1568	RD¼PS 562J	Carbon film	5.6k	
R1569	RD¼PS 122J	Carbon film	1.2k	
R1570	RD¼PS 122J	Carbon film	1.2k	
R1571	RD¼PS 124J	Carbon film	120k	
R1572	RD¼PS 124J	Carbon film	120k	
R1573	RD¼PS 104J	Carbon film	100k	
R1574	RD¼PS 104J	Carbon film	100k	
R1575	RD¼PS 472J	Carbon film	4.7k	
R1576	RD¼PS 472J	Carbon film	4.7k	
R1577	RD¼PS 222J	Carbon film	2.2k	
R1578	RD¼PS 222J	Carbon film	2.2k	
R1579	RD¼PS 124J	Carbon film	120k	
R1580	RD¼PS 124J	Carbon film	120k	
R1581	RD¼PS 103J	Carbon film	10k	
R1582	RD¼PS 103J	Carbon film	10k	
R1583	RD¼PS 223J	Carbon film	22k	
R1584	RD¼PS 223J	Carbon film	22k	
R1585	RD¼PS 103J	Carbon film	10k	
R1586	RD¼PS 103J	Carbon film	10k	
R1587	RD¼PS 682J	Carbon film	6.8k	
R1588	RD¼PS 682J	Carbon film	6.8k	
R1589	RD¼PS 103J	Carbon film	10k	
R1590	RD¼PS 103J	Carbon film	10k	
R1591	RD¼PS 123J	Carbon film	12k	
R1592	RD¼PS 123J	Carbon film	12k	
R1593	RD¼PS 123J	Carbon film	12k	
R1594	RD¼PS 123J	Carbon film	12k	
R1595	RD¼PS 562J	Carbon film	5.6k	
R1596	RS1P 122J	Metal oxide	1.2k	1W
R1597	RS1PSF 221J	Metal oxide	220	1W
R1598	RS1PSF 681J	Metal oxide	680	1W
R1599	RS1P 122J	Metal oxide	1.2k	1W
R1600	RD¼PS 332J	Carbon film	3.3k	
R1601	RD¼PS 222J	Carbon film	2.2k	
R1602	RD¼PS 102J	Carbon film	1k	
R1603	RD¼PS 561J	Carbon film	560	
R1604	RD¼PS 562J	Carbon film	5.6k	
R1605	RD¼PS 102J	Carbon film	1k	
R1606	RD¼PS 562J	Carbon film	5.6k	
R1607	RD¼PS 131J	Carbon film	130	
R1608	RD¼PS 131J	Carbon film	130	
R1609	RD¼PS 105J	Carbon film	1M	
R1610	RD¼PS 105J	Carbon film	1M	

OTHERS

Symbol	Part No.	Description
	RKB-013	Pin jack assembly
	RKB-014	4P mount Pin jack
	RKP-027	Connector (4P)
	RTX-003	Bias oscillator block

SEMICONDUCTORS

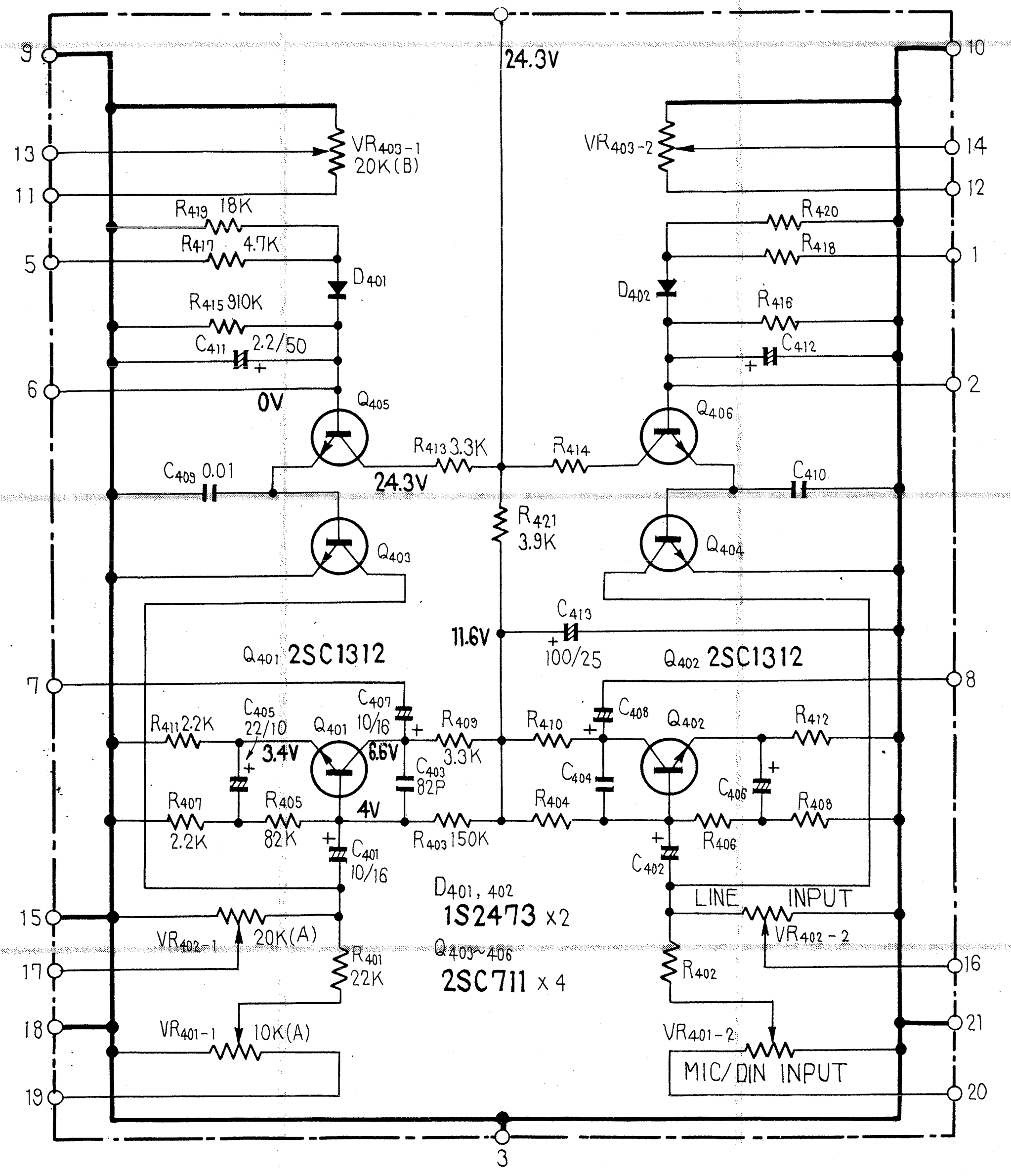
Symbol	Part No.	Description
Q1501	2SC711-E or F	Transistor
Q1502	2SC711-E or F	Transistor
Q1503	2SC711-E or F	Transistor
Q1504	2SC711-E or F	Transistor
Q1505	2SC1312-G or H	Transistor
Q1506	2SC1312-G or H	Transistor
Q1507	2SC711-E or F	Transistor
Q1508	2SC711-E or F	Transistor
Q1509	2SC711-E or F	Transistor
Q1510	2SC711-E or F	Transistor
Q1511	2SC711-E or F	Transistor
Q1512	2SC711-E or F	Transistor
Q1513	2SC711-E or F	Transistor
Q1514	2SC711-E or F	Transistor
Q1515	2SC711-E or F	Transistor
Q1516	2SC711-E or F	Transistor
Q1517	2SC711-E or F	Transistor
Q1518	2SC711-E or F	Transistor
Q1519	2SC711-E or F	Transistor
Q1520	2SC620-D or E	Transistor
D1501	1S2473	Diode
D1502	1S2473	Diode
D1503	1S2473	Diode
D1504	1S2473	Diode
D1505	1S2473	Diode
D1506	1S2473	Diode
D1507	1S2473	Diode
D1508	1S2473	Diode

List of Changed Parts for Factory Modification

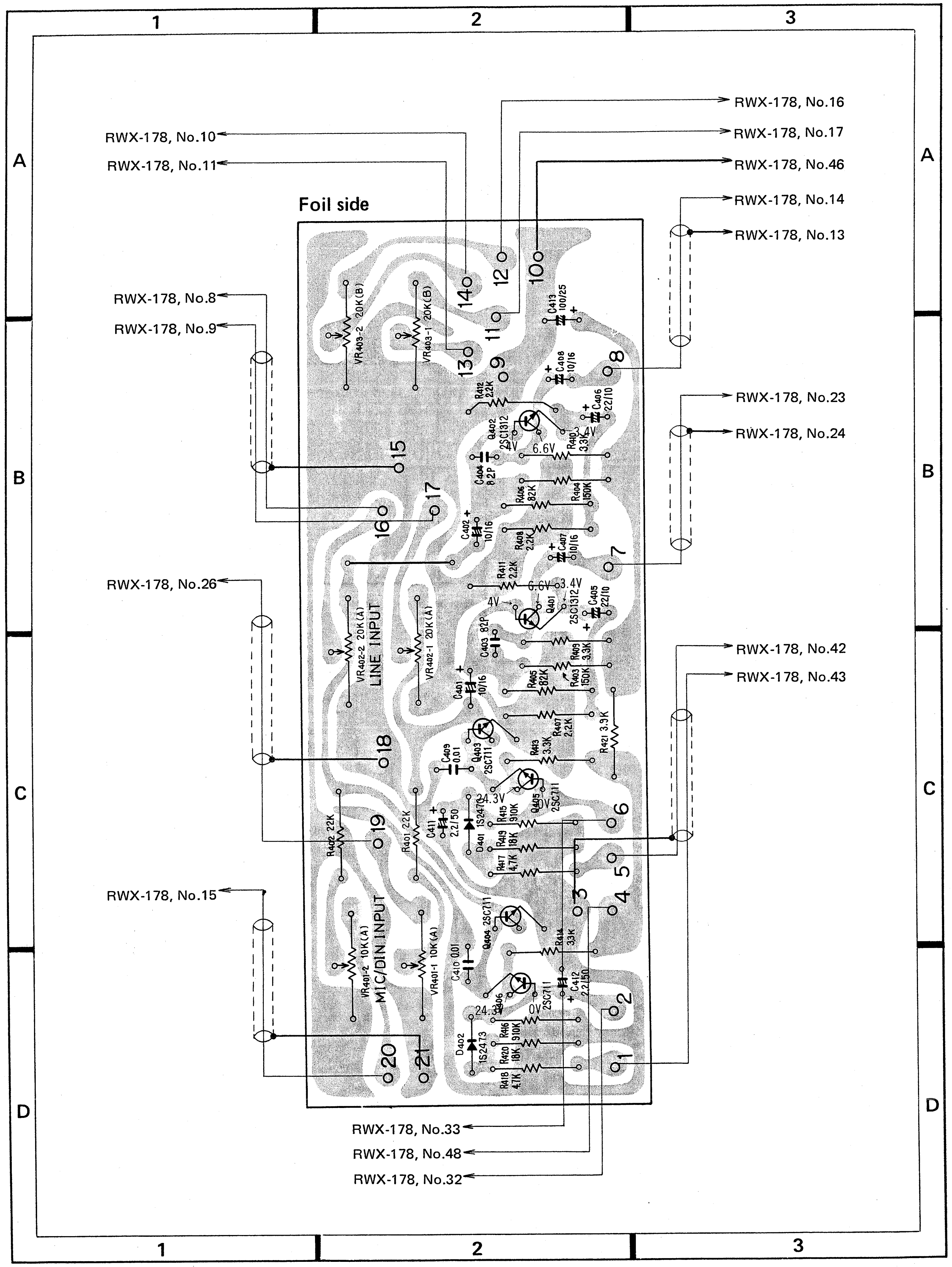
Symbol	Part No.	Description

9.7 VOLUME ASSEMBLY (RWX-181)

		MUTING ON
Q_{405}	Collector	24.2V
	Base	1.2V
	Emitter	0.5V



1
2
3
A
B
C
D
4
24.3V
9
10
13
11
14
12
VR403-1
20K(B)
VR403-2
R419 18K
R420
R417 4.7K
R418
5
1
D401
D402
R415 910K
R416
C411 2.2/50
C412
6
2
0V
Q405
Q406
R413 3.3K
R414
24.3V
C409 0.01
C410
R421
3.9K
Q403
Q404
C413
100/25
11.6V
Q401 2SC1312
Q402 2SC1312
7
8
C407
10/16
R411 2.2K
C405
22/10
Q401
R409
3.3K
R410
C408
Q402
R412
3.4V
6.6V
C403
82P
C404
C406
R407
2.2K
R405
82K
4V
R403 150K
R404
R406
R408
C401
10/16
C402
D401, 402
1S2473 x2
LINE
INPUT
15
VR402-1
20K(A)
VR402-2
Q403~406
2SC711 x4
17
R401
22K
R402
16
18
VR401-1
10K(A)
VR401-2
21
MIC/DIN INPUT
19
20
3


1
2
3
A
B
C
D
Foil side
RWX-178, No.10
RWX-178, No.11
RWX-178, No.16
RWX-178, No.17
RWX-178, No.46
RWX-178, No.14
RWX-178, No.13
RWX-178, No.8
RWX-178, No.9
RWX-178, No.23
RWX-178, No.24
RWX-178, No.26
RWX-178, No.42
RWX-178, No.43
RWX-178, No.15
RWX-178, No.33
RWX-178, No.48
RWX-178, No.32
VR403-2 20K(B)
VR403-1 20K(B)
VR402-2 20K(A)
VR402-1 20K(A)
LINE INPUT
VR401-2 10K(A)
VR401-1 10K(A)
MIC/DIN INPUT
Q401 2SC1312
Q402 2SC1312
Q403 2SC711
Q404 2SC711
Q405 2SC711
Q406 2SC711
D401 1S2473
D402 1S2473
C413 100/25
C408 10/16
C406 22/10
C404 82P
C402 10/16
C407 10/16
C405 22/10
C403 82P
C401 10/16
C409 0.01
C411 2.2/50
C410 0.01
C412 2.2/50
R412 22K
R410 3.3K
R406 82K
R404 150K
R408 2.2K
R411 2.2K
R405 82K
R403 150K
R409 3.3K
R407 2.2K
R421 3.9K
R413 3.3K
R402 22K
R401 22K
R415 910K
R419 18K
R417 4.7K
R414 33K
R416 910K
R420 18K
R418 4.7K
6.6V
3.4V
4V
24.3V
0V
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

Parts List

CAPACITORS

Symbol	Part No.	Description		
C401	CEA 100P 16	Electrolytic	10	16V
C402	CEA 100P 16	Electrolytic	10	16V
C403	CCDSL 820K 50	Ceramic	82p	50V
C404	CCDSL 820K 50	Ceramic	82p	50V
C405	CEA 220P 10	Electrolytic	22	10V
C406	CEA 220P 10	Electrolytic	22	10V
C407	CEA 100P 16	Electrolytic	10	16V
C408	CEA 100P 16	Electrolytic	10	16V
C409	CQMA 103K 50	Mylar	0.01	50V
C410	CQMA 103K 50	Mylar	0.01	50V
C411	CEA 2R2P 50	Electrolytic	2.2	50V
C412	CEA 2R2P 50	Electrolytic	2.2	50V
C413	CEA 101P 25	Electrolytic	100	25V

RESISTORS

Symbol	Part No.	Description	
VR401	RCV-041	Variable resistor	10k-A
VR402	RCV-042	Variable resistor	20k-A
VR403	RCV-043	Variable resistor	20k-B
R401	RD¼PS 223J	Carbon film	22k
R402	RD¼PS 223J	Carbon film	22k
R403	RD¼PS 154J	Carbon film	150k
R404	RD¼PS 154J	Carbon film	150k
R405	RD¼PS 823J	Carbon film	82k
R406	RD¼PS 823J	Carbon film	82k
R407	RD¼PS 222J	Carbon film	2.2k
R408	RD¼PS 222J	Carbon film	2.2k
R409	RD¼PS 332J	Carbon film	3.3k
R410	RD¼PS 332J	Carbon film	3.3k
R411	RD¼PS 222J	Carbon film	2.2k
R412	RD¼PS 222J	Carbon film	2.2k
R413	RD¼PS 332J	Carbon film	3.3k
R414	RD¼PS 332J	Carbon film	3.3k
R415	RD¼PS 914J	Carbon film	910k
R416	RD¼PS 914J	Carbon film	910k
R417	RD¼PS 472J	Carbon film	4.7k
R418	RD¼PS 472J	Carbon film	4.7k
R419	RD¼PS 183J	Carbon film	18k
R420	RD¼PS 183J	Carbon film	18k
R421	RD¼PS 392J	Carbon film	3.9k

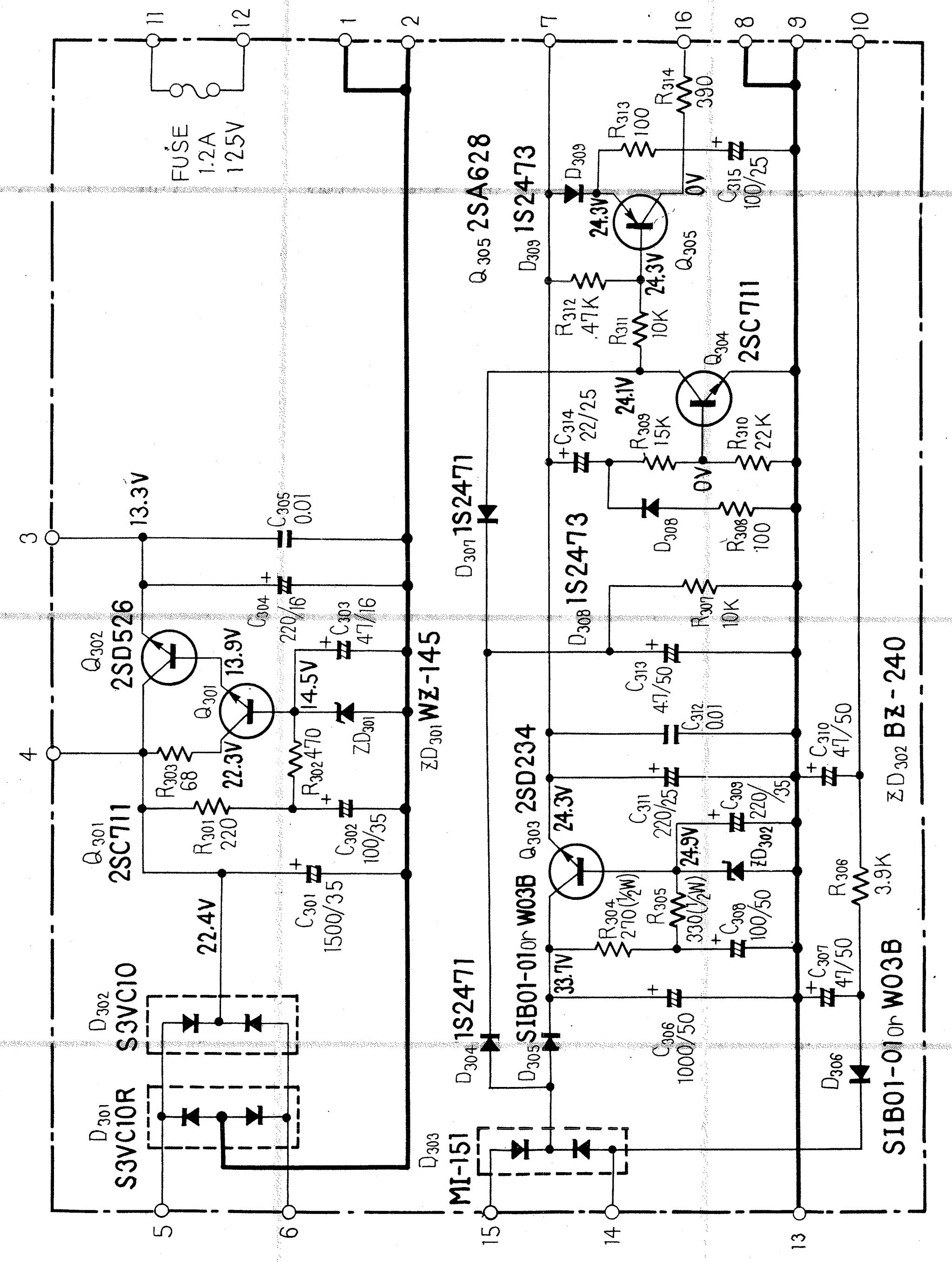
SEMICONDUCTORS

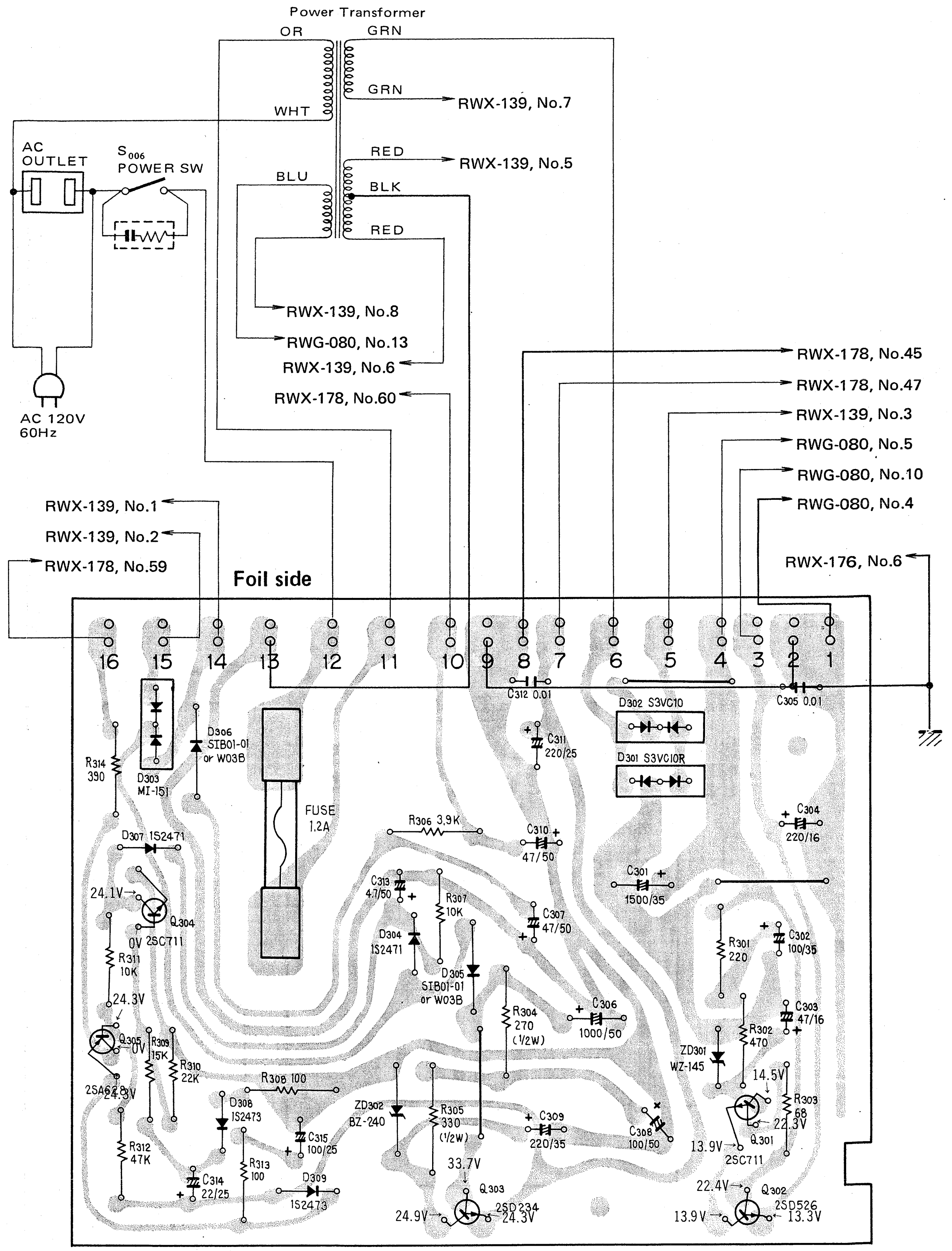
Symbol	Part No.	Description
Q401	2SC1312-G or H	Transistor
Q402	2SC1312-G or H	Transistor
Q403	2SC711-E or F	Transistor
Q404	2SC711-E or F	Transistor
Q405	2SC711-E or F	Transistor
Q406	2SC711-E or F	Transistor
D401	1S2473	Diode
D402	1S2473	Diode

List of Changed Parts for Factory Modification

Symbol	Part No.	Description

9.8 POWER SUPPLY ASSEMBLY (RWR-055)


FUSE 1.2A 125V
11
12
1
2
7
16
8
9
10
3
4
5
6
15
14
13
13.3V
C305 0.01
Q302 2SD526
Q301
13.9V
C304 220/16
C303 47/16
14.5V
ZD301
ZD301 WZ-145
R303 68
22.3V
R302 470
R301 220
C302 100/35
Q301 2SC711
22.4V
C301 1500/35
D302 S3VC10
D301 S3VC10R
Q305 2SA628
D309 1S2473
R313 100
R314 390
C315 100/25
24.3V
0V
Q305
R312 47K
R311 10K
24.1V
Q304 2SC711
C314 22/25
R309 15K
R310 22K
D307 1S2471
D308
R308 100
D308 1S2473
R307 10K
C313 47/50
C312 0.01
Q303 2SD234
C311 220/25
C309 220/35
ZD302
24.9V
R304 270 (1/2W)
R305 330 (1/2W)
C308 100/50
33.7V
C306 1000/50
D304 1S2471
D305 SIB01-01 or W03B
D303 MI-151
C310 47/50
R306 3.9K
C307 47/50
ZD302 BZ-240
D306 SIB01-01 or W03B


Power Transformer
OR
GRN
GRN
RWX-139, No.7
WHT
AC OUTLET
S006 POWER SW
RED
RWX-139, No.5
BLU
BLK
RED
RWX-139, No.8
RWG-080, No.13
RWX-139, No.6
RWX-178, No.60
AC 120V 60Hz
RWX-178, No.45
RWX-178, No.47
RWX-139, No.3
RWG-080, No.5
RWG-080, No.10
RWG-080, No.4
RWX-139, No.1
RWX-139, No.2
RWX-178, No.59
RWX-176, No.6
Foil side
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
C312 0.01
C305 0.01
D302 S3VC10
D301 S3VC10R
C311 220/25
R314 390
D303 MI-151
D306 SIB01-01 or W03B
FUSE 1.2A
D307 1S2471
R306 3.9K
C310 47/50
C304 220/16
24.1V
Q304
0V 2SC711
C313 47/50
R307 10K
C307 47/50
C301 1500/35
R311 10K
D304 1S2471
D305 SIB01-01 or W03B
R301 220
C302 100/35
24.3V
R304 270 (1/2W)
C306 1000/50
C303 47/16
Q305
0V
R309 15K
R310 22K
R302 470
ZD301 WZ-145
2SA628
24.3V
R308 100
D308 1S2473
ZD302 BZ-240
R305 330 (1/2W)
C309 220/35
C308 100/50
14.5V
R303 68
22.3V
Q301
13.9V
2SC711
R312 47K
C315 100/25
R313 100
C314 22/25
D309 1S2473
33.7V
Q303
2SD234
24.9V
24.3V
22.4V
Q302
2SD526
13.9V
13.3V

Parts List

FUSE

Symbol	Part No.	Description
FU1	REK-059	Fuse (1.2A)

CAPACITORS

Symbol	Part No.	Description		
C301	CEA 152P 35	Electrolytic	1500	35V
C302	CEA 101P 35	Electrolytic	100	35V
C303	CEA 470P 16	Electrolytic	47	16V
C304	CEA 221P 16	Electrolytic	220	16V
C305	CKDYF 103Z 50	Ceramic	0.01	50V
C306	CEA 102P 50	Electrolytic	1000	50V
C307	CEA 470P 50	Electrolytic	47	50V
C308	CEA 101P 50	Electrolytic	100	50V
C309	CEA 221P 35	Electrolytic	220	35V
C310	CEA 470P 50	Electrolytic	47	50V
C311	CEA 221P 25	Electrolytic	220	25V
C312	CKDYF 103Z 50	Ceramic	0.01	50V
C313	CEA 4R7P 50	Electrolytic	4.7	50V
C314	CEA 220P 25	Electrolytic	22	25V
C315	CEA 101P 25	Electrolytic	100	25V

RESISTORS

Symbol	Part No.	Description		
R301	RD¼PSF 221J	Carbon film	220	
R302	RD¼PSF 471J	Carbon film	470	
R303	RD¼PSF 680J	Carbon film	68	
R304	RS½PSF 271J	Carbon film	270	½W
R305	RS½PSF 331J	Carbon film	330	½W
R306	RD¼PS 392J	Carbon film	3.9k	
R307	RD¼PS 103J	Carbon film	10k	
R308	RD¼PS 101J	Carbon film	100	
R309	RD¼PS 153J	Carbon film	15k	
R310	RD¼PS 223J	Carbon film	22k	
R311	RD¼PS 103J	Carbon film	10k	
R312	RD¼PS 473J	Carbon film	47k	
R313	RD¼PSF 101J	Carbon film	100	
R314	RD¼PS 391J	Carbon film	390	

OTHERS

Symbol	Part No.	Description
	RKR-017	Fuse clip
	RKH-004	Insulator
	REE-051	Insulator

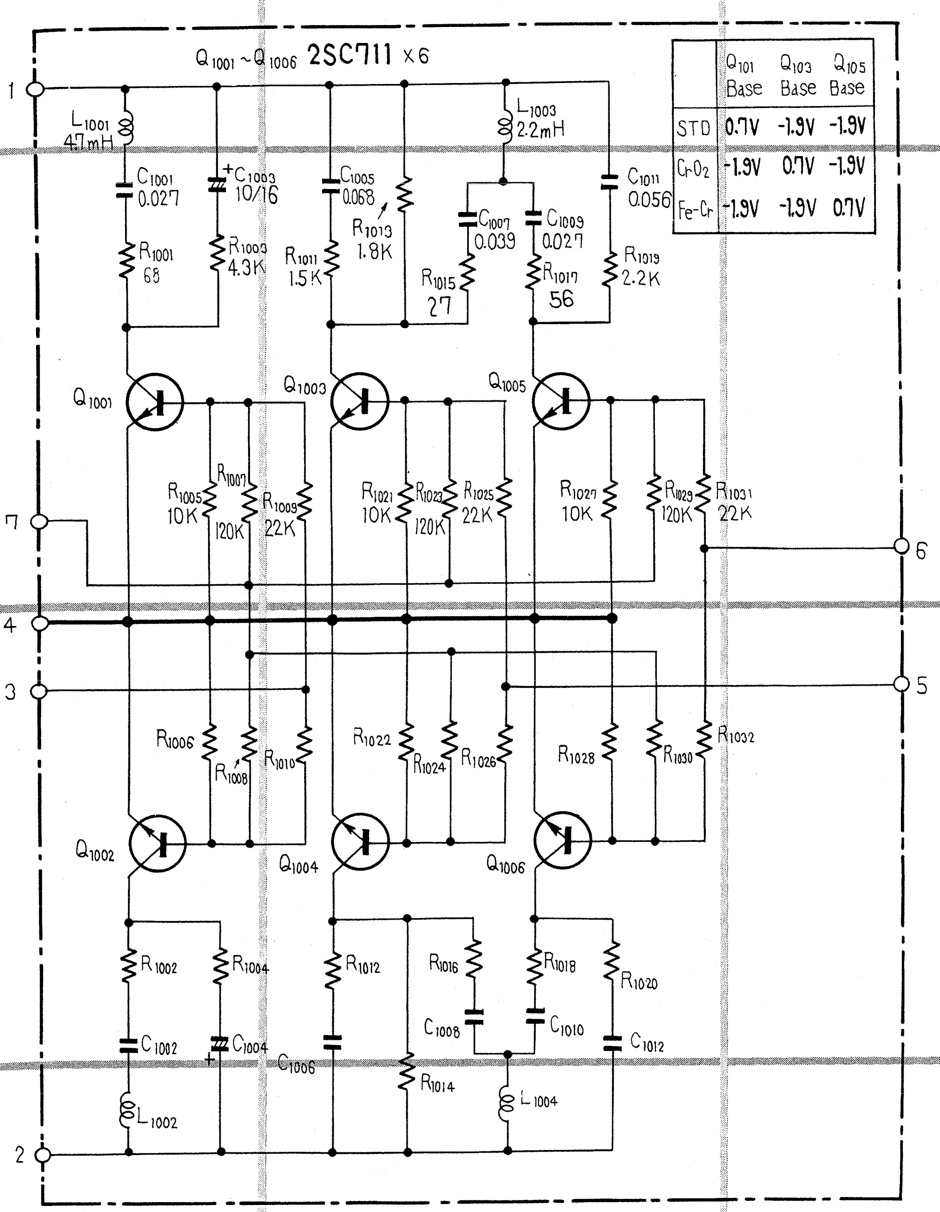
SEMICONDUCTORS

Symbol	Part No.	Description
Q301	2SC711-E or F	Transistor
Q302	2SD526-O or Y	Transistor
Q303	2SD234-O or Y	Transistor
Q304	2SC711-E or F	Transistor
Q305	2SA628-E or F	Transistor
D301	S3VC10R	Diode
D302	S3VC10	Diode
D303	MI-151	Diode
D304	1S2471	Diode
D305	SIB01-01 or W03B	Diode
D306	SIB01-01 or W03B	Diode
D307	1S2471	Diode
D308	1S2473	Diode
D309	1S2473	Diode
ZD301	WZ-145	Zener Diode
ZD302	BZ-240	Zener Diode

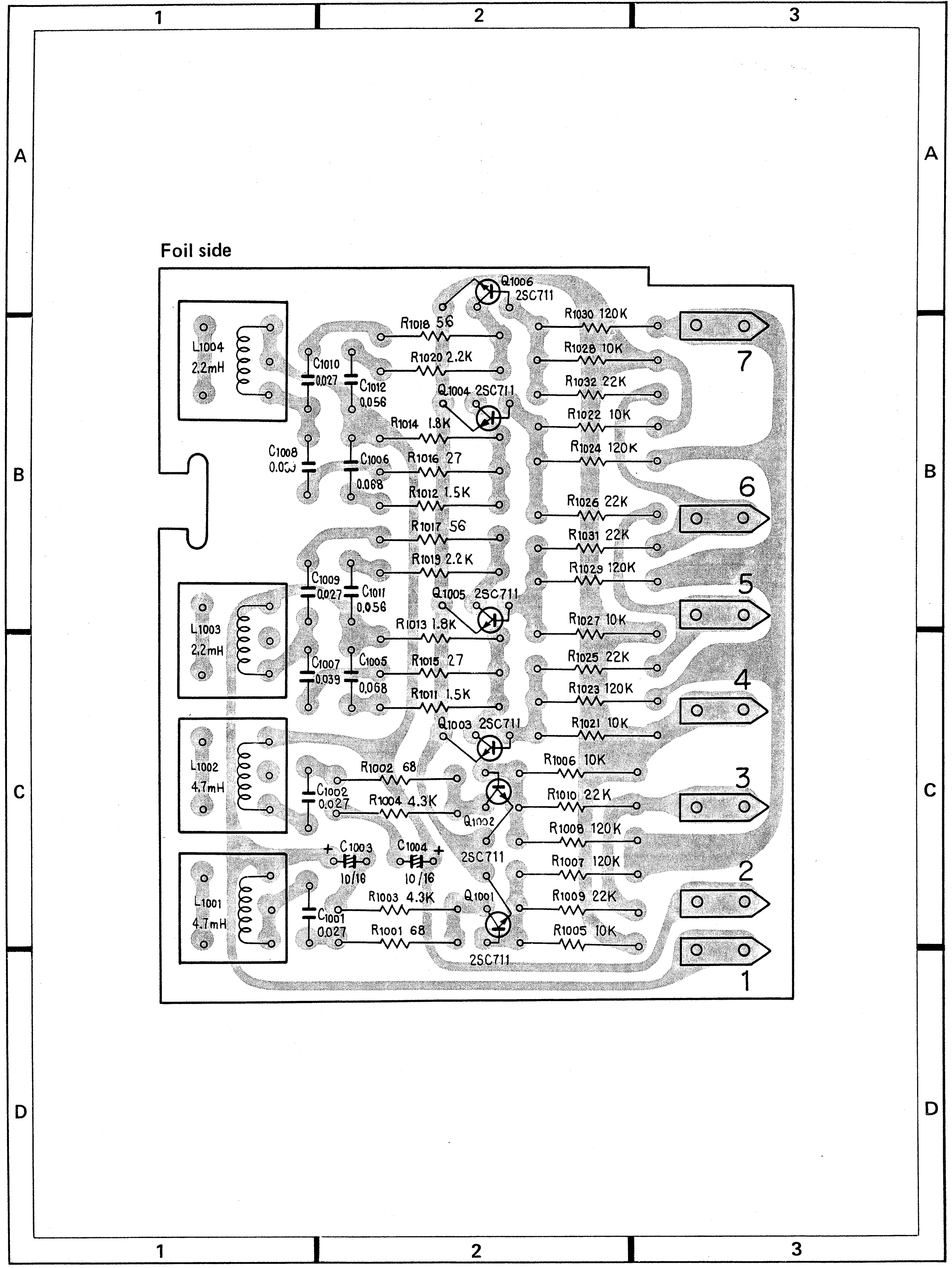
List of Changed Parts for Factory Modification

Symbol	Part No.	Description

9.9 RECORDING EQUALIZER ASSEMBLY (RWX-182)


Q1001 ~ Q1006 2SC711 ×6
1
2
3
4
5
6
7
L1001 4.7mH
C1001 0.027
C1003 10/16
R1001 68
R1003 4.3K
C1005 0.068
R1011 1.5K
R1013 1.8K
L1003 2.2mH
C1007 0.039
C1009 0.027
R1015 27
R1017 56
C1011 0.056
R1019 2.2K
Q1001
Q1003
Q1005
R1005 10K
R1007 120K
R1009 22K
R1021 10K
R1023 120K
R1025 22K
R1027 10K
R1029 120K
R1031 22K
R1006
R1008
R1010
R1022
R1024
R1026
R1028
R1030
R1032
Q1002
Q1004
Q1006
R1002
R1004
R1012
R1016
R1018
R1020
C1002
C1004
C1006
C1008
C1010
C1012
R1014
L1002
L1004

	Q101 Base	Q103 Base	Q105 Base
STD	0.7V	-1.9V	-1.9V
CrO2	-1.9V	0.7V	-1.9V
Fe-Cr	-1.9V	-1.9V	0.7V


1
2
3
A
B
C
D
Foil side
Q1006 2SC711
R1018 56
R1020 2.2K
R1030 120K
R1028 10K
R1032 22K
L1004 2.2mH
C1010 0.027
C1012 0.056
Q1004 2SC711
R1022 10K
R1014 1.8K
R1024 120K
C1008
C1006 0.068
R1016 27
R1012 1.5K
R1026 22K
R1017 56
R1031 22K
R1019 2.2K
R1029 120K
C1009 0.027
C1011 0.056
Q1005 2SC711
R1013 1.8K
R1027 10K
L1003 2.2mH
C1007 0.039
C1005 0.068
R1015 27
R1025 22K
R1011 1.5K
R1023 120K
Q1003 2SC711
R1021 10K
L1002 4.7mH
R1002 68
R1006 10K
C1002 0.027
R1004 4.3K
R1010 22K
Q1002
R1008 120K
C1003 10/16
C1004 10/16
2SC711
R1007 120K
R1003 4.3K
Q1001
R1009 22K
L1001 4.7mH
C1001 0.027
R1001 68
R1005 10K
2SC711
7
6
5
4
3
2
1

Parts List

COILS

Symbol	Part No.	Description
L1001	RTF-031	Peaking coil
L1002	RTF-031	Peaking coil
L1003	RTF-037	Peaking coil
L1004	RTF-037	Peaking coil

CAPACITORS

Symbol	Part No.	Description		
C1001	CQMA 273K 50	Mylar	0.027	50V
C1002	CQMA 273K 50	Mylar	0.027	50V
C1003	CEA 100P 16	Electrolytic	10	16V
C1004	CEA 100P 16	Electrolytic	10	16V
C1005	CQMA 683K 50	Mylar	0.068	60V
C1006	CQMA 683K 50	Mylar	0.068	50V
C1007	CQMA 393K 50	Mylar	0.039	50V
C1008	CQMA 393K 50	Mylar	0.039	50V
C1009	CQMA 273K 50	Mylar	0.027	50V
C1010	CQMA 273K 50	Mylar	0.027	50V
C1011	CQMA 563K 50	Mylar	0.056	50V
C1012	CQMA 563K 50	Mylar	0.056	50V

RESISTORS

Symbol	Part No.	Description	
R1001	RD¼PS 680J	Carbon film	68
R1002	RD¼PS 680J	Carbon film	68
R1003	RD¼PS 432J	Carbon film	4.3k
R1004	RD¼PS 432J	Carbon film	4.3k
R1005	RD¼PS 103J	Carbon film	10k
R1006	RD¼PS 103J	Carbon film	10k
R1007	RD¼PS 124J	Carbon film	120k
R1008	RD¼PS 124J	Carbon film	120k
R1009	RD¼PS 223J	Carbon film	22k
R1010	RD¼PS 223J	Carbon film	22k
R1011	RD¼PS 152J	Carbon film	1.5k
R1012	RD¼PS 152J	Carbon film	1.5k
R1013	RD¼PS 182J	Carbon film	1.8k
R1014	RD¼PS 182J	Carbon film	1.8k
R1015	RD¼PS 270J	Carbon film	27
R1016	RD¼PS 270J	Carbon film	27
R1017	RD¼PS 560J	Carbon film	56
R1018	RD¼PS 560J	Carbon film	56
R1019	RD¼PS 222J	Carbon film	2.2k
R1020	RD¼PS 222J	Carbon film	2.2k
R1021	RD¼PS 103J	Carbon film	10k
R1022	RD¼PS 103J	Carbon film	10k
R1023	RD¼PS 124J	Carbon film	120k
R1024	RD¼PS 124J	Carbon film	120k
R1025	RD¼PS 223J	Carbon film	22k
R1026	RD¼PS 223J	Carbon film	22k
R1027	RD¼PS 103J	Carbon film	10k
R1028	RD¼PS 103J	Carbon film	10k
R1029	RD¼PS 124J	Carbon film	120k
R1030	RD¼PS 124J	Carbon film	120k
R1031	RD¼PS 223J	Carbon film	22k
R1032	RD¼PS 223J	Carbon film	22k

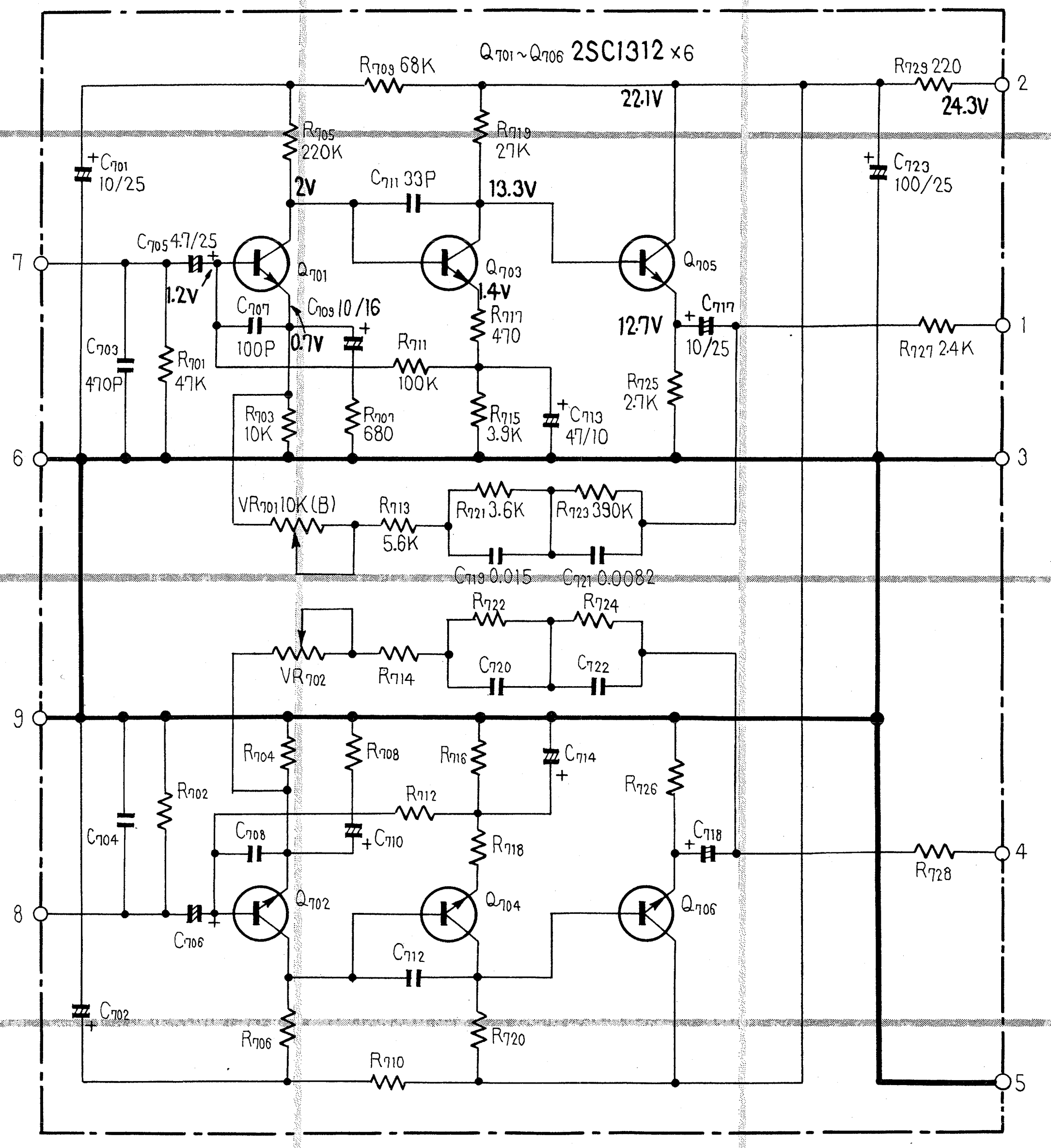
SEMICONDUCTORS

Symbol	Part No.	Description
Q1001	2SC711-E or F	Transistor
Q1002	2SC711-E or F	Transistor
Q1003	2SC711-E or F	Transistor
Q1004	2SC711-E or F	Transistor
Q1005	2SC711-E or F	Transistor
Q1006	2SC711-E or F	Transistor

List of Changed Parts for Factory Modification

Symbol	Part No.	Description

9.10 PLAYBACK EQUALIZER ASSEMBLY (RWF-079)


Q701~Q706 2SC1312 ×6
R703 68K
R729 220
22.1V
24.3V
R705 220K
R719 27K
C701 10/25
C723 100/25
2V
C711 33P
13.3V
C705 4.7/25
Q701
Q703
Q705
1.2V
C707 100P
C709 10/16
0.7V
1.4V
R717 470
12.7V
C717 10/25
R727 24K
C703 470P
R701 47K
R711 100K
R725 27K
R703 10K
R707 680
R715 3.9K
C713 47/10
VR701 10K(B)
R713 5.6K
R721 3.6K
R723 390K
C719 0.015
C721 0.0082
R722
R724
VR702
R714
C720
C722
R704
R708
R716
C714
R702
R712
R726
C704
C708
C710
R718
C718
R728
C706
Q702
Q704
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C712
C702
R706
R710
R720
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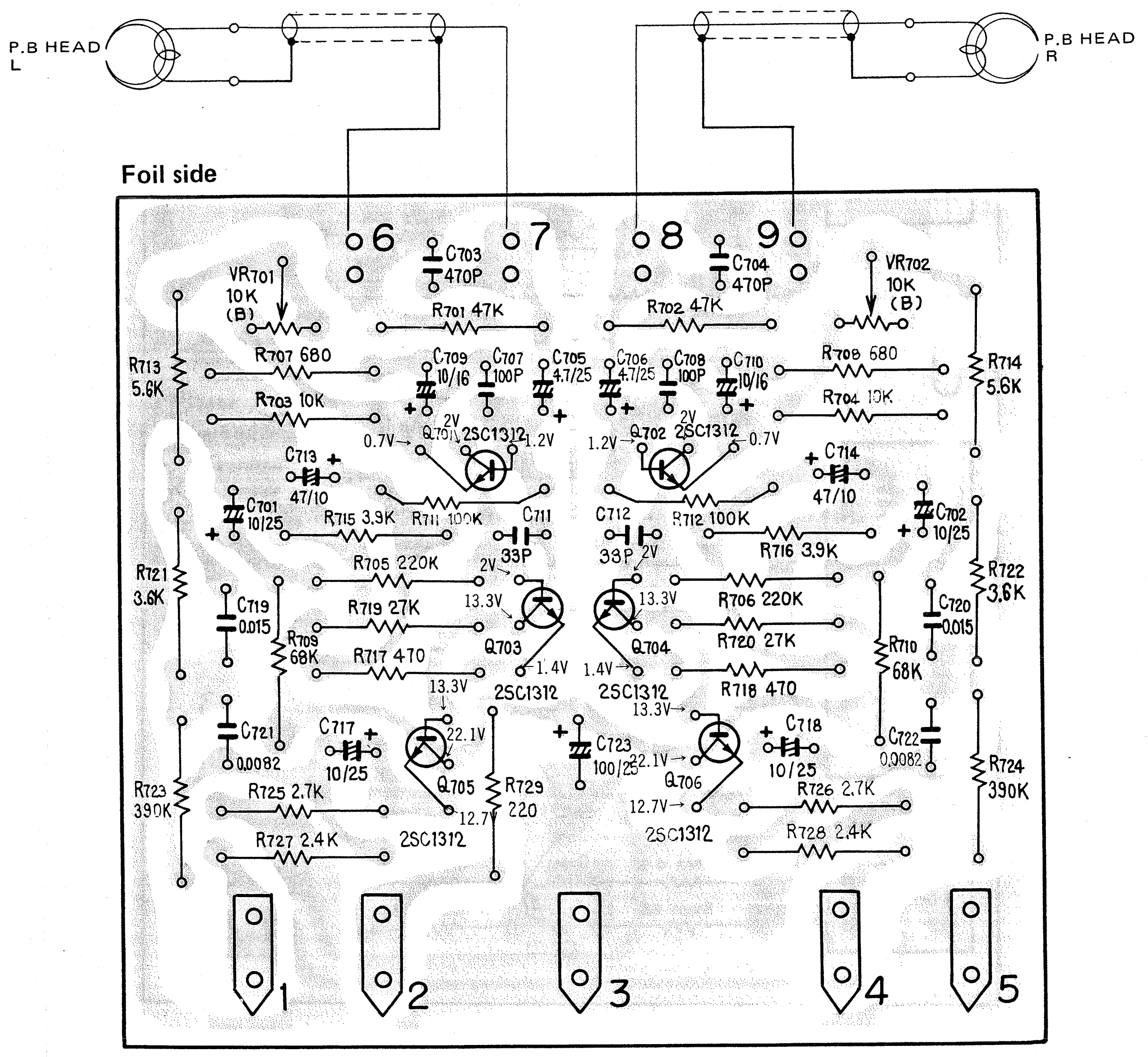
3
4
5
6
7
8
9


P.B HEAD L
P.B HEAD R
Foil side
6
7
8
9
C703 470P
C704 470P
VR701 10K (B)
VR702 10K (B)
R701 47K
R702 47K
R713 5.6K
R714 5.6K
R707 680
R708 680
C709 10/16
C707 100P
C705 4.7/25
C706 4.7/25
C708 100P
C710 10/16
R703 10K
R704 10K
0.7V
2V
Q701
2SC1312
1.2V
Q702
C713 47/10
C714 47/10
C701 10/25
C702 10/25
R715 3.9K
R711 100K
C711 33P
C712 33P
R712 100K
R716 3.9K
R705 220K
R706 220K
R721 3.6K
R722 3.6K
C719 0.015
C720 0.015
R719 27K
R720 27K
13.3V
Q703
Q704
R709 68K
R710 68K
R717 470
R718 470
1.4V
C721 0.0082
C722 0.0082
C717 10/25
C718 10/25
22.1V
C723 100/25
Q705
Q706
R729 220
12.7V
R723 390K
R724 390K
R725 2.7K
R726 2.7K
R727 2.4K
R728 2.4K
1
2
3
4
5

Parts List

CAPACITORS

Symbol	Part No.	Description		
C701	CEA 100P 25	Electrolytic	10	25V
C702	CEA 100P 25	Electrolytic	10	25V
C703	RCE-014	Polystyren	470p	50V
C704	RCE-014	Polystyren	470p	50V
C705	RCH-017	Electrolytic	4.7	25V
C706	RCH-017	Electrolytic	4.7	25V
C707	CCDSL 101K 50	Ceramic	100p	50V
C708	CCDSL 101K 50	Ceramic	100p	50V
C709	CEA 100P 16	Electrolytic	10	16V
C710	CEA 100P 16	Electrolytic	10	16V
C711	CCDSL 330K 50	Ceramic	33p	50V
C712	CCDSL 330K 50	Ceramic	33p	50V
C713	CEA 470P 10	Electrolytic	47	10V
C714	CEA 470P 10	Electrolytic	47	10V
C717	CEA 100P 25	Electrolytic	10	25V
C718	CEA 100P 25	Electrolytic	10	25V
C719	CQMA 153K 50	Mylar	0.015	50V
C720	CQMA 153K 50	Mylar	0.015	50V
C721	CQMA 822K 50	Mylar	8200p	50V
C722	CQMA 822K 50	Mylar	8200p	50V
C723	CEA 101P 25	Electrolytic	100	25V

RESISTORS

Symbol	Part No.	Description	
VR701	RCP-032	Semi-fixed	10k-B
VR702	RCP-032	Semi-fixed	10k-B
R701	RD¼PS 473J	Carbon film	47k
R702	RD¼PS 473J	Carbon film	47k
R703	RD¼PS 103J	Carbon film	10k
R704	RD¼PS 103J	Carbon film	10k
R705	RD¼PS 224J	Carbon film	220k
R706	RD¼PS 224J	Carbon film	220k
R707	RD¼PS 681J	Carbon film	680
R708	RD¼PS 681J	Carbon film	680
R709	RD¼PS 683J	Carbon film	68k
R710	RD¼PS 683J	Carbon film	68k
R711	RD¼PS 104J	Carbon film	100k
R712	RD¼PS 104J	Carbon film	100k
R713	RD¼PS 562J	Carbon film	5.6k
R714	RD¼PS 562J	Carbon film	5.6k
R715	RD¼PS 392J	Carbon film	3.9k
R716	RD¼PS 392J	Carbon film	3.9k
R717	RD¼PS 471J	Carbon film	470
R718	RD¼PS 471J	Carbon film	470
R719	RD¼PS 273J	Carbon film	27k
R720	RD¼PS 273J	Carbon film	27k

Symbol	Part No.	Description	
R721	RD¼PS 362J	Carbon film	3.6k
R722	RD¼PS 362J	Carbon film	3.6k
R723	RD¼PS 394J	Carbon film	390k
R724	RD¼PS 394J	Carbon film	390k
R725	RD¼PS 272J	Carbon film	2.7k
R726	RD¼PS 272J	Carbon film	2.7k
R727	RD¼PS 242J	Carbon film	2.4k
R728	RD¼PS 242J	Carbon film	2.4k
R729	RD¼PSF 221J	Carbon film	220

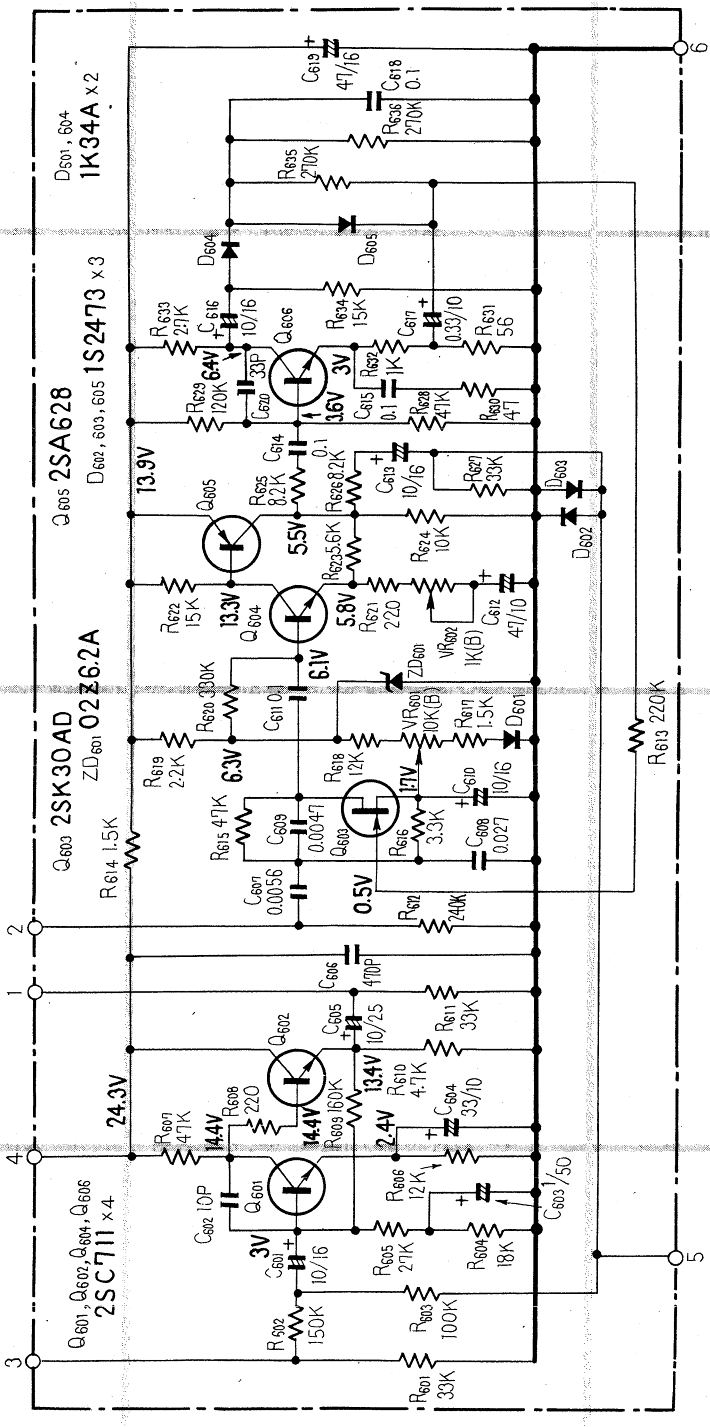
SEMICONDUCTORS

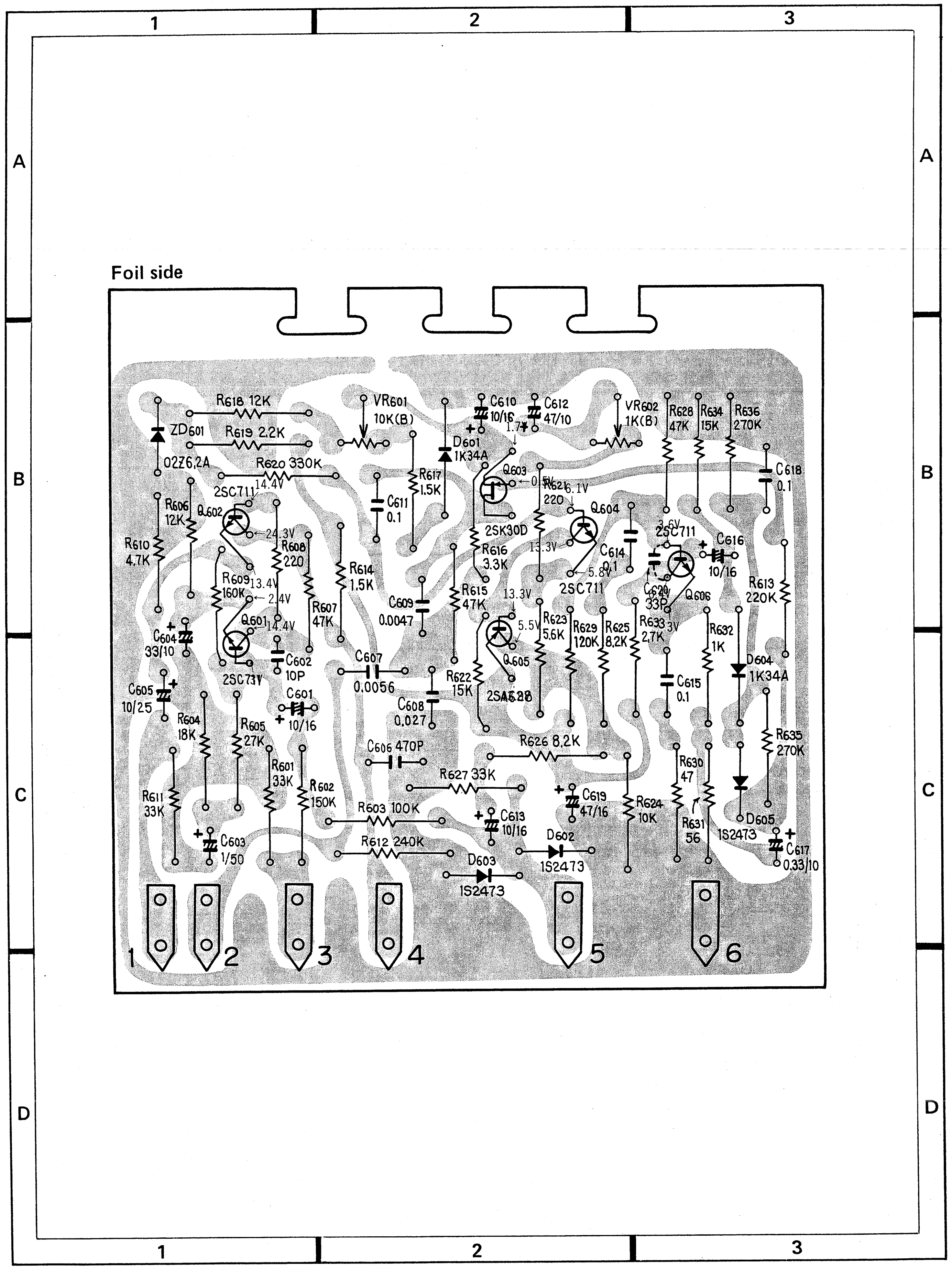
Symbol	Part No.	Description
Q701	2SC1312-G or H	Transistor
Q702	2SC1312-G or H	Transistor
Q703	2SC1312-G or H	Transistor
Q704	2SC1312-G or H	Transistor
Q705	2SC1312-G or H	Transistor
Q706	2SC1312-G or H	Transistor

List of Changed Parts for Factory Modification

Symbol	Part No.	Description

9.11 DOLBY ASSEMBLY (RWX-183)


D601, 604 1K34A ×2
D602, 603, 605 1S2473 ×3
Q605 2SA628
Q603 2SK30AD
ZD601 02Z6.2A
Q601, Q602, Q604, Q606 2SC711 ×4
C619 47/16
C618 0.1
R636 270K
R635 270K
D604
D605
R633 27K
C616 10/16
Q606
R634 15K
C617 0.33/10
R631 56
R629 120K
6.4V
C620 33P
3V
R632 1K
C615 0.1
R628 47K
R630 47
3.6V
13.9V
C614 0.1
Q605
R625 8.2K
R626 8.2K
C613 10/16
R627 33K
D603
D602
5.5V
R623 5.6K
R624 10K
R622 15K
13.3V
Q604
5.8V
R621 220
VR602 1K(B)
C612 47/10
6.1V
R620 330K
C611 0.1
ZD601
VR601 10K(B)
R617 1.5K
D601
R613 220K
R619 2.2K
6.3V
R618 12K
1.1V
C610 10/16
R615 47K
C609 0.0047
Q603
R616 3.3K
C608 0.027
R614 1.5K
C607 0.0056
0.5V
R612 240K
C606 470P
R611 33K
C605 10/25
Q602
24.3V
R607 47K
R608 220
14.4V
14.4V
R609 160K
13.4V
R610 4.7K
2.4V
C604 33/10
C602 10P
Q601
R606 12K
C603 1/50
3V
C601 10/16
R605 27K
R604 18K
R602 150K
R603 100K
R601 33K
1
2
3
4
5
6
A
B
C
D


Foil side
1
2
3
A
B
C
D
R618 12K
R619 2.2K
R620 330K
ZD601
02Z6.2A
VR601 10K(B)
VR602 1K(B)
C610 10/16
C612 47/10
D601 1K34A
R617 1.5K
C611 0.1
Q603
R621 220
2SK30D
R616 3.3K
Q604
2SC711
C614 0.1
R628 47K
R634 15K
R636 270K
C618 0.1
C616 10/16
Q606
C620 33P
R613 220K
2SC711
Q602
R606 12K
R610 4.7K
R608 220
R609 160K
Q601
2SC711
R607 47K
R614 1.5K
C609 0.0047
R615 47K
C604 33/10
C602 10P
C601 10/16
C607 0.0056
C608 0.027
R622 15K
2SA628
Q605
R623 5.6K
R629 120K
R625 8.2K
R633 2.7K
R632 1K
D604 1K34A
C615 0.1
C605 10/25
R604 18K
R605 27K
C606 470P
R626 8.2K
R635 270K
R611 33K
R601 33K
R602 150K
R627 33K
R630 47
C603 1/50
R603 100K
C613 10/16
C619 47/16
R624 10K
R631 56
D605
1S2473
C617 0.33/10
R612 240K
D602 1S2473
D603 1S2473
1
2
3
4
5
6

Parts List

CAPACITORS

Symbol	Part No.	Description		
C601	CEA 100P 16	Electrolytic	10	16V
C602	CCDSL 100K 50	Ceramic	10p	50V
C603	CEA 010P 50	Electrolytic	1	50V
C604	CEA 330P 10	Electrolytic	33	10V
C605	CEA 100P 25	Electrolytic	10	25V
C606	CKDYB 471K 50	Ceramic	470p	50V
C607	CQMA 562J.50	Mylar	5600p	50V
C608	CQMA 273J 50	Mylar	0.027	50V
C609	CQMA 472J 50	Mylar	4700p	50V
C610	CEA 100P 16	Electrolytic	10	16V
C611	CQMA 104K 50	Mylar	0.1	50V
C612	CEA 470P 10	Electrolytic	47	10V
C613	CEA 100P 16	Electrolytic	10	16V
C614	CQMA 104K 50	Mylar	0.1	50V
C615	CQMA 104K 50	Mylar	0.1	50V
C616	CEA 100P 16	Electrolytic	10	16V
C617	CSSA R33M 10	Electrolytic	0.33	10V
C618	CQMA 104K 50	Mylar	0.1	50V
C619	CEA 470P 16	Electrolytic	47	16V
C620	CCDSL 330K 50	Ceramic	33p	50V

RESISTORS

Symbol	Part No.	Description	
VR601	RCP-032	Semi-fixed	10k-B
VR602	RCP-033	Semi-fixed	10k-B
R601	RD¼PS 333J	Carbon film	33k
R602	RD¼PS 154J	Carbon film	150k
R603	RD¼PS 104J	Carbon film	100k
R604	RD¼PS 183J	Carbon film	18k
R605	RD¼PS 273J	Carbon film	27k
R606	RD¼PS 123J	Carbon film	12k
R607	RD¼PS 473J	Carbon film	47k
R608	RD¼PS 221J	Carbon film	220
R609	RD¼PS 164J	Carbon film	160k
R610	RD¼PS 472J	Carbon film	4.7k
R611	RD¼PS 333J	Carbon film	33k
R612	RD¼PS 244J	Carbon film	240k
R613	RD¼PS 224J	Carbon film	220k
R614	RD¼PS 152J	Carbon film	1.5k
R615	RD¼PS 473J	Carbon film	47k
R616	RD¼PS 332J	Carbon film	3.3k
R617	RD¼PS 152J	Carbon film	1.5k
R618	RD¼PS 123J	Carbon film	12k
R619	RD¼PS 222J	Carbon film	2.2k
R620	RD¼PS 334J	Carbon film	330k
R621	RD¼PS 221J	Carbon film	220
R622	RD¼PS 153J	Carbon film	15k
R623	RD¼PS 562J	Carbon film	5.6k

Symbol	Part No.	Description	
R624	RD¼PS 103J	Carbon film	10k
R625	RD¼PS 822J	Carbon film	8.2k
R626	RD¼PS 822J	Carbon film	8.2k
R627	RD¼PS 333J	Carbon film	33k
R628	RD¼PS 473J	Carbon film	47k
R629	RD¼PS 124J	Carbon film	120k
R630	RD¼PS 470J	Carbon film	47
R631	RD¼PS 560J	Carbon film	56
R632	RD¼PS 102J	Carbon film	1k
R633	RD¼PS 272J	Carbon film	2.7k
R634	RD¼PS 153J	Carbon film	15k
R635	RD¼PS 274J	Carbon film	270k
R636	RD¼PS 274J	Carbon film	270k

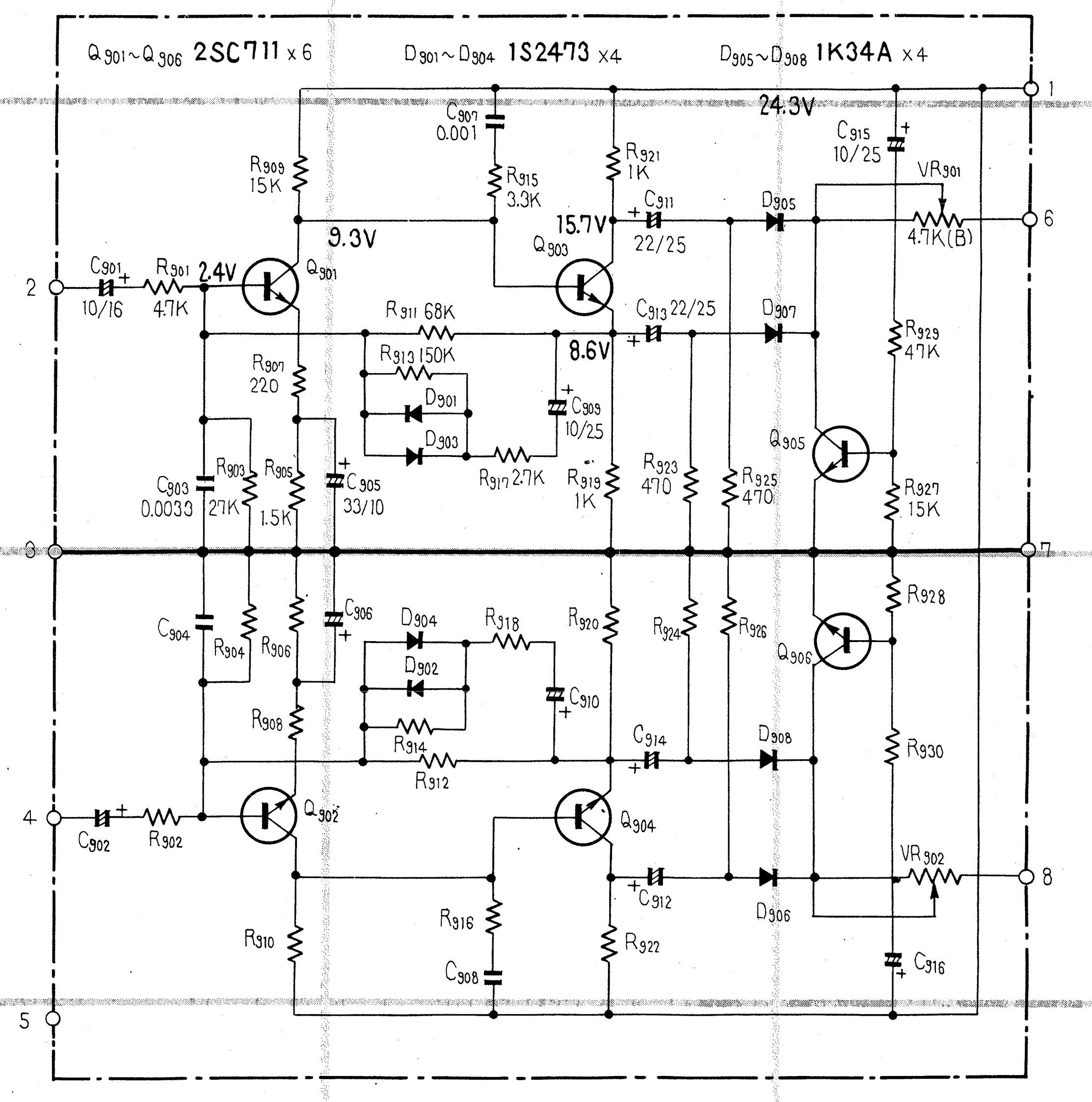
SEMICONDUCTORS

Symbol	Part No.	Description
Q601	2SC711-E or F	Transistor
Q602	2SC711-E or F	Transistor
Q603	2SK30AD	FET
Q604	2SC711-E or F	Transistor
Q605	2SA628-E or F	Transistor
Q606	2SC711-E or F	Transistor
D601	1K34A	Diode
D602	1S2473	Diode
D603	1S2473	Diode
D604	1K34A	Diode
D605	1S2473	Diode
ZD601	02Z6.2A	Zener Diode

List of Changed Parts for Factory Modification

Symbol	Part No.	Description

9.12 METER ASSEMBLY (RWX-180)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D901~D904 1S2473 x4
D905~D908 1K34A x4
24.3V
9.3V
15.7V
8.6V
2.4V
C901 10/16
R901 4.7K
Q901
Q902
Q903
Q904
Q905
Q906
R909 15K
R907 220
R903 27K
R905 1.5K
C903 0.0033
C905 33/10
C907 0.001
R915 3.3K
R921 1K
C911 22/25
C913 22/25
R911 68K
R913 150K
D901
D903
R917 2.7K
C909 10/25
R919 1K
R923 470
R925 470
D905
D907
C915 10/25
VR901 4.7K(B)
R929 47K
R927 15K
R928
R930
C904
R904
R906
C906
D904
D902
R918
C910
R914
R912
R908
R920
R924
R926
C914
D908
D906
C902
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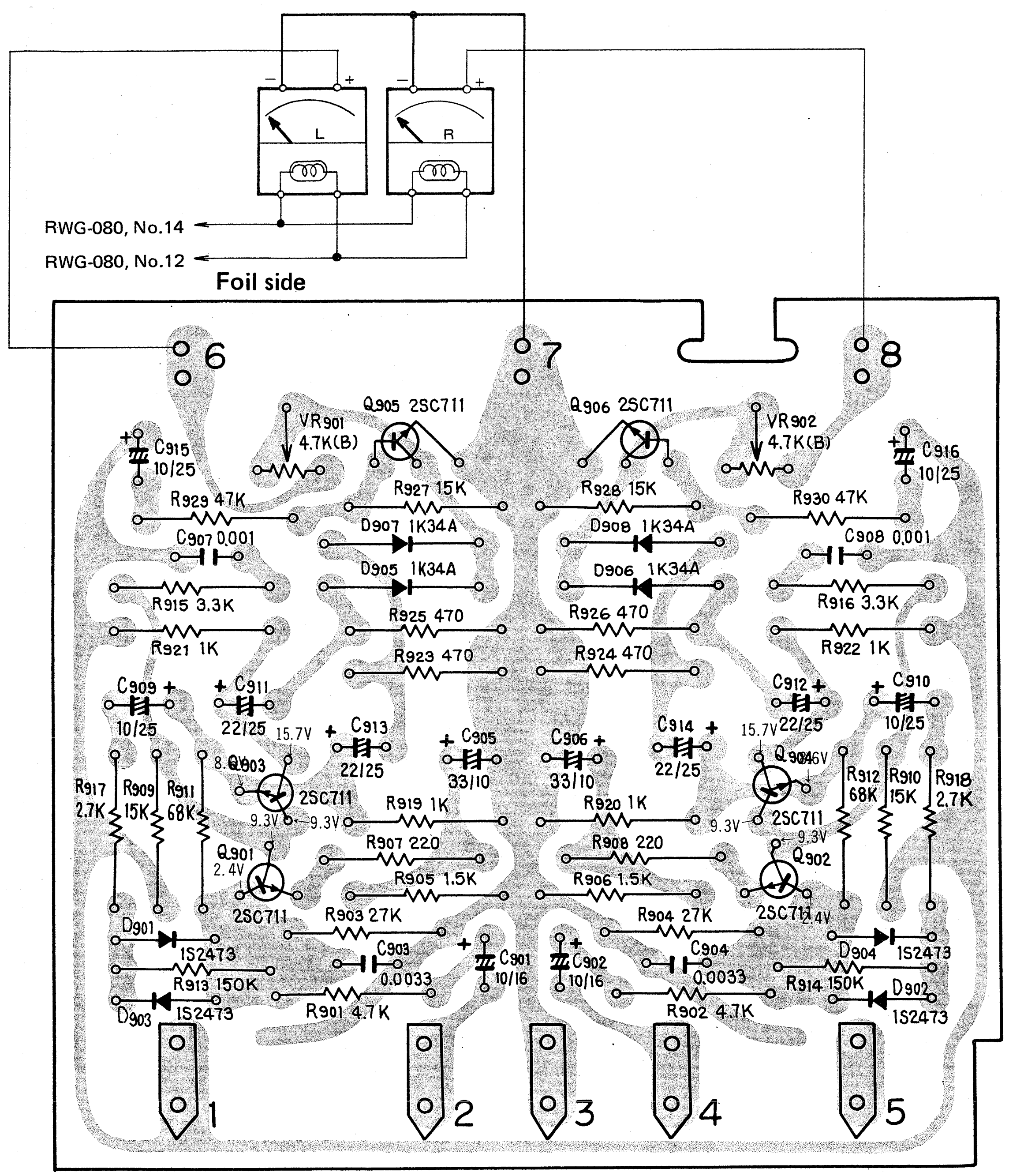
2
3
4
5
6
7
8


L
R
RWG-080, No.14
RWG-080, No.12
Foil side
6
7
8
1
2
3
4
5
Q905 2SC711
Q906 2SC711
VR901 4.7K(B)
VR902 4.7K(B)
C915 10/25
C916 10/25
R929 47K
R927 15K
R928 15K
R930 47K
C907 0.001
C908 0.001
D907 1K34A
D908 1K34A
D905 1K34A
D906 1K34A
R915 3.3K
R916 3.3K
R925 470
R926 470
R921 1K
R922 1K
R923 470
R924 470
C909 10/25
C911 22/25
C913 22/25
C905 33/10
C906 33/10
C914 22/25
C912 22/25
C910 10/25
15.7V
8.6V
Q903
2SC711
9.3V
Q904
R917 2.7K
R909 15K
R911 68K
R912 68K
R910 15K
R918 2.7K
R919 1K
R920 1K
R907 220
R908 220
R905 1.5K
R906 1.5K
Q901
2.4V
2SC711
Q902
R903 27K
R904 27K
C903 0.0033
C904 0.0033
C901 10/16
C902 10/16
D901
1S2473
R913 150K
R914 150K
D903
D904
D902
R901 4.7K
R902 4.7K

Parts List

CAPACITORS

Symbol	Part No.	Description		
C901	CEA 100P 16	Electrolytic	10	16V
C902	CEA 100P 16	Electrolytic	10	16V
C903	CKDYB 332K 50	Ceramic	3300p	50V
C904	CKDYB 332K 50	Ceramic	3300p	50V
C905	CEA 330P 10	Electrolytic	33	10V
C906	CEA 330P 10	Electrolytic	33	10V
C907	CKDYB 102K 50	Ceramic	1000p	50V
C908	CKDYB 102K 50	Ceramic	1000p	50V
C909	CEA 100P 25	Electrolytic	10	25V
C910	CEA 100P 25	Electrolytic	10	25V
C911	CEA 220P 25	Electrolytic	22	25V
C912	CEA 220P 25	Electrolytic	22	25V
C913	CEA 220P 25	Electrolytic	22	25V
C914	CEA 220P 25	Electrolytic	22	25V
C915	CEA 100P 25	Electrolytic	10	25V
C916	CEA 100P 25	Electrolytic	10	25V

RESISTORS

Symbol	Part No.	Description	
VR901	RCP-038	Semi-fixed	4.7k-B
VR902	RCP-038	Semi-fixed	4.7k-B
R901	RD¼PS 472J	Carbon film	4.7k
R902	RD¼PS 472J	Carbon film	4.7k
R903	RD¼PS 273J	Carbon film	27k
R904	RD¼PS 273J	Carbon film	27k
R905	RD¼PS 152J	Carbon film	1.5k
R906	RD¼PS 152J	Carbon film	1.5k
R907	RD¼PS 221J	Carbon film	220
R908	RD¼PS 221J	Carbon film	220
R909	RD¼PS 153J	Carbon film	15k
R910	RD¼PS 153J	Carbon film	15k
R911	RD¼PS 683J	Carbon film	68k
R912	RD¼PS 683J	Carbon film	68k
R913	RD¼PS 154J	Carbon film	150k
R914	RD¼PS 154J	Carbon film	150k
R915	RD¼PS 332J	Carbon film	3.3k
R916	RD¼PS 332J	Carbon film	3.3k
R917	RD¼PS 272J	Carbon film	2.7k
R918	RD¼PS 272J	Carbon film	2.7k
R919	RD¼PS 102J	Carbon film	1k
R920	RD¼PS 102J	Carbon film	1k
R921	RD¼PS 102J	Carbon film	1k
R922	RD¼PS 102J	Carbon film	1k
R923	RD¼PS 471J	Carbon film	470
R924	RD¼PS 471J	Carbon film	470
R925	RD¼PS 471J	Carbon film	470
R926	RD¼PS 471J	Carbon film	470
R927	RD¼PS 153J	Carbon film	15k
R928	RD¼PS 153J	Carbon film	15k
R929	RD¼PS 473J	Carbon film	47k
R930	RD¼PS 473J	Carbon film	47k

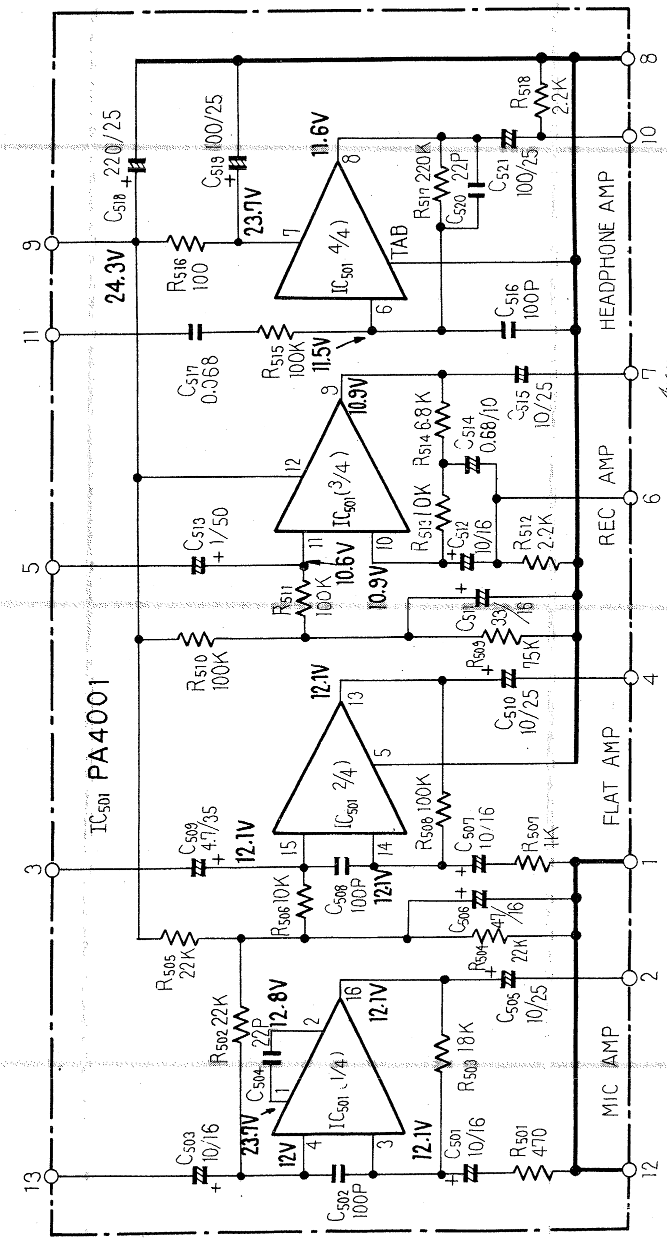
SEMICONDUCTORS

Symbol	Part No.	Description
Q901	2SC711-E or F	Transistor
Q902	2SC711-E or F	Transistor
Q903	2SC711-E or F	Transistor
Q904	2SC711-E or F	Transistor
Q905	2SC711-E or F	Transistor
Q906	2SC711-E or F	Transistor
D901	1S2473	Diode
D902	1S2473	Diode
D903	1S2473	Diode
D904	1S2473	Diode
D905	1K34A	Diode
D906	1K34A	Diode
D907	1K34A	Diode
D908	1K34A	Diode

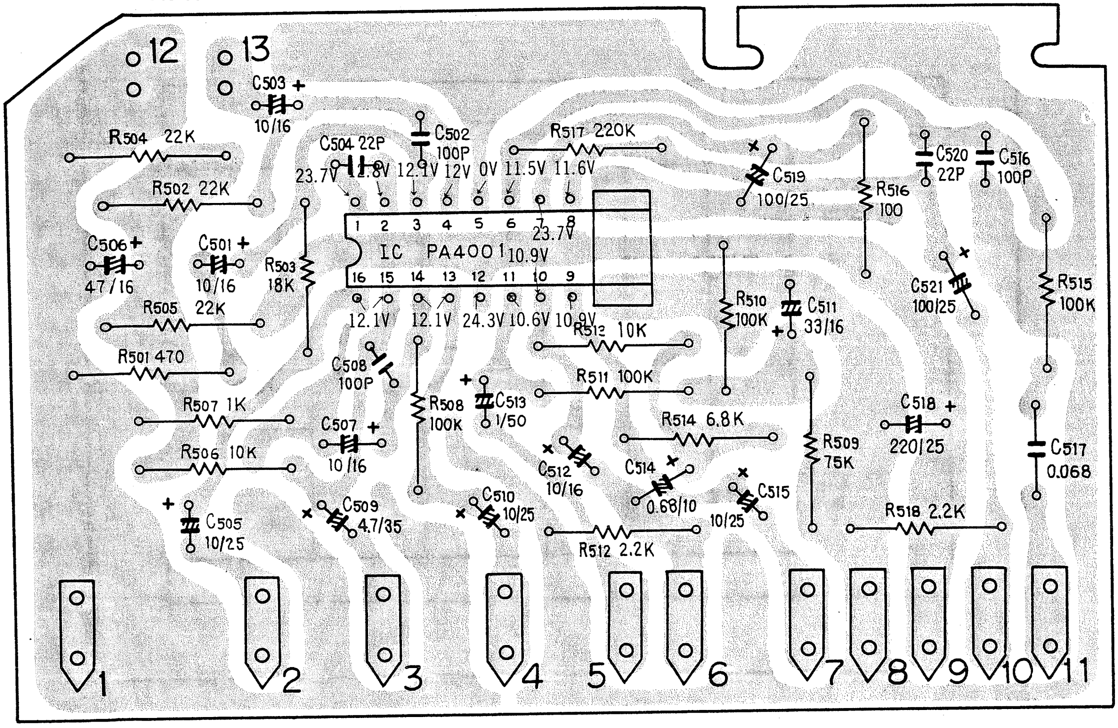
List of Changed Parts for Factory Modification

Symbol	Part No.	Description

9.13 INTEGRATED ASSEMBLY (RWX-175)


1
2
3
A
B
C
D
IC501 PA4001
HEADPHONE AMP
REC AMP
FLAT AMP
MIC AMP
IC501 4/4
IC501 (3/4)
IC501 2/4
IC501 1/4
TAB
C518 220/25
C519 100/25
R516 100
24.3V
23.7V
11.6V
R517 220K
C520 22P
C521 100/25
R518 2.2K
C516 100P
C517 0.068
R515 100K
11.5V
10.9V
R514 6.8K
C514 0.68/10
C515 10/25
R513 10K
C512 10/16
R512 2.2K
C513 1/50
R511 100K
10.6V
10.9V
C511 33/16
R509 15K
R510 100K
12.1V
C510 10/25
C509 4.7/35
12.1V
R508 100K
C507 10/16
R507 1K
R506 10K
C508 100P
12.1V
C506 47/16
R504 22K
R505 22K
R502 22K
12.8V
C504 22P
12.1V
C505 10/25
R503 18K
23.1V
12V
12.1V
C503 10/16
C501 10/16
R501 470
C502 100P
8
10
9
11
7
6
5
4
3
1
2
13
12

Foil side


12
13
C503 + 10/16
R504 22K
R502 22K
C506 + 47/16
C501 + 10/16
R503 18K
R505 22K
R501 470
R507 1K
R506 10K
C505 + 10/25
C504 22P
C502 100P
23.7V
12.8V
12.1V
12V
0V
11.5V
11.6V
1 2 3 4 5 6 7 8
IC PA4001
16 15 14 13 12 11 10 9
23.7V
10.9V
12.1V
12.1V
24.3V
10.6V
10.9V
C508 100P
C507 + 10/16
R508 100K
C513 + 1/50
C509 4.7/35
C510 10/25
C512 10/16
R517 220K
C519 100/25
R516 100
C520 22P
C516 100P
R510 100K
C511 + 33/16
C521 100/25
R515 100K
R513 10K
R511 100K
R514 6.8K
R509 75K
C518 + 220/25
C517 0.068
C514 0.68/10
C515 10/25
R512 2.2K
R518 2.2K
1
2
3
4
5
6
7
8
9
10
11

Parts List

CAPACITORS

Symbol	Part No.	Description		
C501	CEA 100P 16	Electrolytic	10	16V
C502	CCDSL 101K 50	Ceramic	100p	50V
C503	CEANL 100P 16	Electrolytic	10	16V
C504	CCDSL 220K 50	Ceramic	22p	50V
C505	CEA 100P 25	Electrolytic	10	25V
C506	CEA 470P 16	Electrolytic	47	16V
C507	CEA 100P 16	Electrolytic	10	16V
C508	CCDSL 101K 50	Ceramic	100p	50V
C509	CEA 4R7P 35	Electrolytic	4.7	35V
C510	CEA 100P 25	Electrolytic	10	25V
C511	CEA 330P 16	Electrolytic	33	16V
C512	CEA 100P 16	Electrolytic	10	16V
C513	CEA 010P 50	Electrolytic	0.1	50V
C514	CSSA R68M 10	Electrolytic	0.68	10V
C515	CEA 100P 25	Electrolytic	10	25V
C516	CCDSL 101K 50	Ceramic	100p	50V
C517	CQMA 683K 50	Mylar	0.068	50V
C518	CEA 221P 25	Electrolytic	220	25V
C519	CEA 101P 25	Electrolytic	100	25V
C520	CCDSL 220K 50	Ceramic	22p	50V
C521	CEA 101P 25	Electrolytic	100	25V

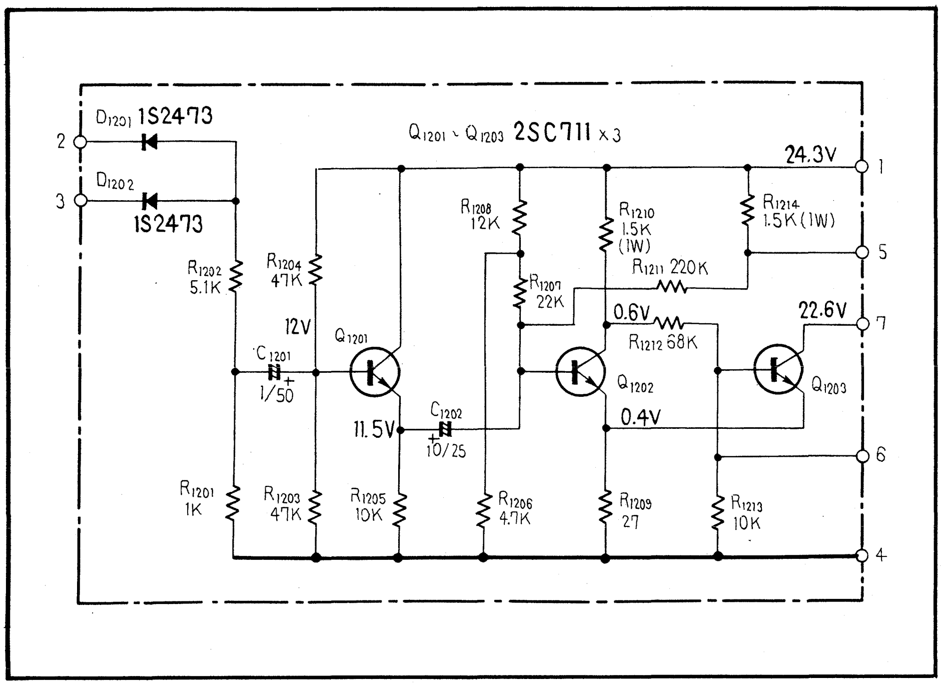
RESISTORS

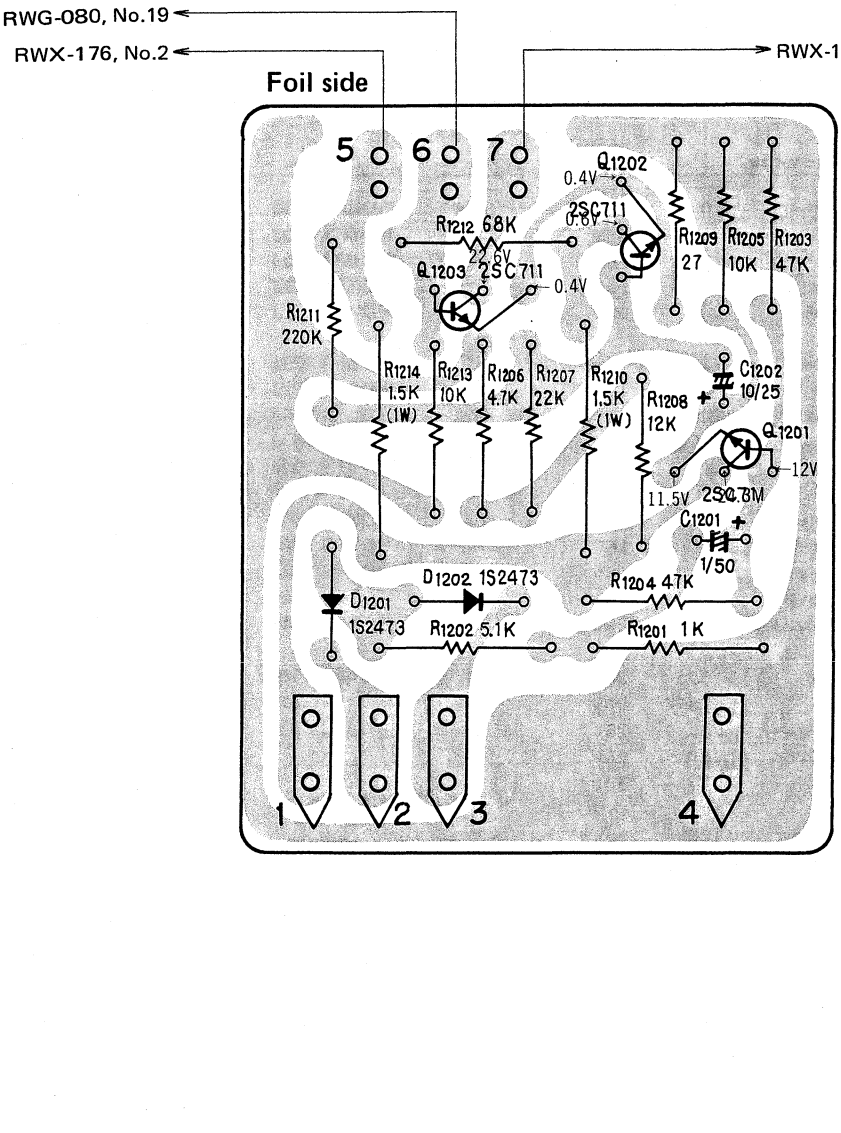
Symbol	Part No.	Description	
R501	RD¼PS 471J	Carbon film	470
R502	RD¼PS 223J	Carbon film	22k
R503	RD¼PS 183J	Carbon film	18k
R504	RD¼PS 223J	Carbon film	22k
R505	RD¼PS 223J	Carbon film	22k
R506	RD¼PS 103J	Carbon film	10k
R507	RD¼PS 102J	Carbon film	1k
R508	RD¼PS 104J	Carbon film	100k
R509	RD¼PS 753J	Carbon film	75k
R510	RD¼PS 104J	Carbon film	100k
R511	RD¼PS 104J	Carbon film	100k
R512	RD¼PS 222J	Carbon film	2.2k
R513	RD¼PS 103J	Carbon film	10k
R514	RD¼PS 682J	Carbon film	6.8k
R515	RD¼PS 104J	Carbon film	100k
R516	RD¼PSF 101J	Carbon film	100
R517	RD¼PS 224J	Carbon film	220k
R518	RD¼PS 222J	Carbon film	2.2k

SEMICONDUCTOR

Symbol	Part No.	Description
IC501	PA4001	IC

9.14 PEAK AMPLIFIER ASSEMBLY (RWX-179)


D1201 1S2473
D1202
1S2473
Q1201 ~ Q1203 2SC711 ×3
24.3V
1
2
3
R1208 12K
R1210 1.5K (1W)
R1214 1.5K (1W)
5
R1211 220K
R1202 5.1K
R1204 47K
R1207 22K
0.6V
R1212 68K
22.6V
7
12V
Q1201
C1201 1/50
Q1202
Q1203
11.5V
C1202 10/25
0.4V
6
R1201 1K
R1203 47K
R1205 10K
R1206 4.7K
R1209 27
R1213 10K
4


RWG-080, No.19
RWX-176, No.2
RWX-176, No.1
Foil side
5
6
7
Q1202
0.4V
2SC711
0.6V
R1212 68K
22.6V
Q1203 2SC711
0.4V
R1209 27
R1205 10K
R1203 47K
R1211 220K
R1214 1.5K (1W)
R1213 10K
R1206 4.7K
R1207 22K
R1210 1.5K (1W)
R1208 12K
C1202 10/25
Q1201
12V
11.5V
2SC711M
C1201 1/50
D1202 1S2473
R1204 47K
D1201 1S2473
R1202 5.1K
R1201 1K
1
2
3
4

Parts List

CAPACITORS

Symbol	Part No.	Description		
C1201	CEA 010P 50	Electrolytic	1	50V
C1202	CEA 100P 25	Electrolytic	10	25V

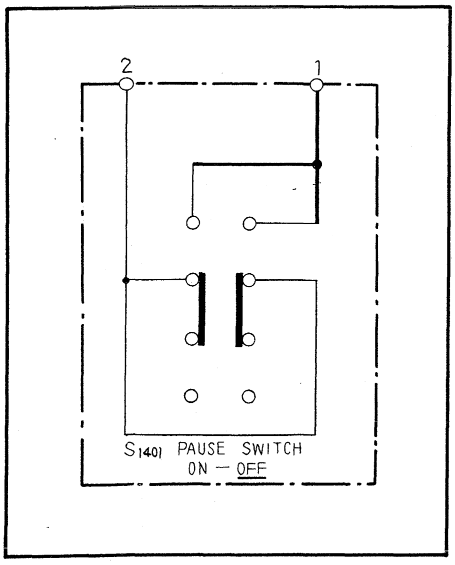
RESISTORS

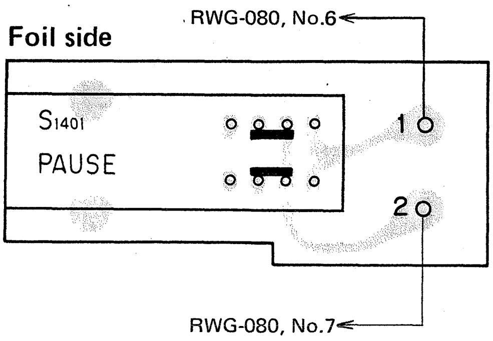
Symbol	Part No.	Description		
R1201	RD¼PS 102J	Carbon film	1k	
R1202	RD¼PS 512J	Carbon film	5.1k	
R1203	RD¼PS 473J	Carbon film	47k	
R1204	RD¼PS 473J	Carbon film	47k	
R1205	RD¼PS 103J	Carbon film	10k	
R1206	RD¼PS 472J	Carbon film	4.7k	
R1207	RD¼PS 223J	Carbon film	22k	
R1208	RD¼PS 123J	Carbon film	12k	
R1209	RD¼PS 270J	Carbon film	27	
R1210	RD1PS 152J	Metal oxide	1.5k	1W
R1211	RD¼PS 224J	Carbon film	220k	
R1212	RD¼PS 683J	Carbon film	68k	
R1213	RD¼PS 103J	Carbon film	10k	
R1214	RS1PS 152J	Metal oxide	1.5k	1W

SEMICONDUCTORS

Symbol	Part No.	Description
Q1201	2SC711-E or F	Transistor
Q1202	2SC711-E or F	Transistor
Q1203	2SC711-E or F	Transistor
D1201	1S2473	Diode
D1202	1S2473	Diode

9.15 PAUSE SWITCH ASSEMBLY (RWS-064)



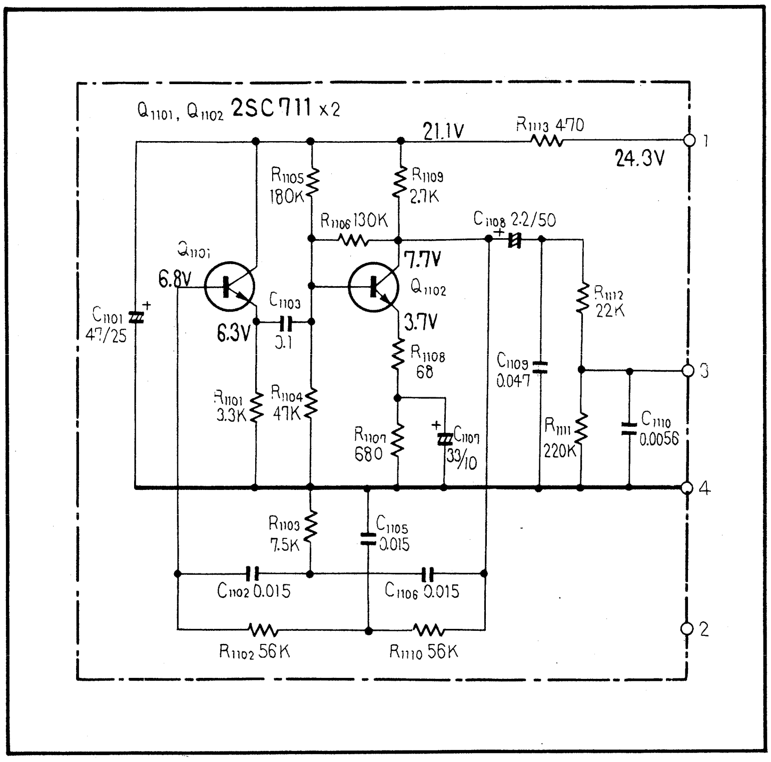


Part List

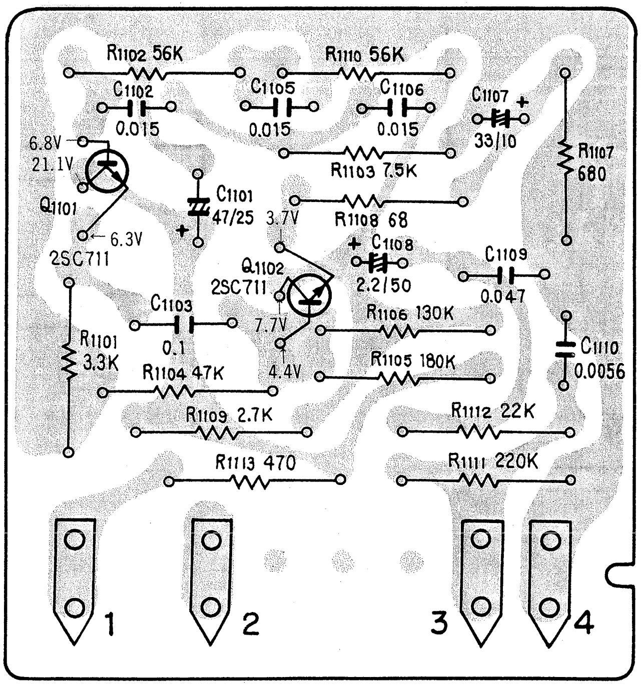
SWITCH

Symbol	Part No.	Description
S1401	RSK-042	Lever switch E

9.16 TEST TONE ASSEMBLY (RWA-028)


Q1101, Q1102 2SC711 x2
21.1V
R1113 470
1
24.3V
R1105 180K
R1109 2.7K
R1106 130K
C1108 2.2/50
Q1101
6.8V
6.3V
C1103 0.1
7.7V
Q1102
3.7V
R1112 22K
C1101 47/25
R1108 68
C1109 0.047
3
R1101 3.3K
R1104 47K
R1107 680
C1107 33/10
R1111 220K
C1110 0.0056
4
R1103 7.5K
C1105 0.015
C1102 0.015
C1106 0.015
2
R1102 56K
R1110 56K

Foil side


R1102 56K
R1110 56K
C1102 0.015
C1105 0.015
C1106 0.015
C1107 33/10
6.8V
21.1V
Q1101
6.3V
2SC711
C1101 47/25
R1103 7.5K
R1107 680
3.7V
R1108 68
C1108 2.2/50
Q1102 2SC711
C1109 0.047
C1103 0.1
7.7V
R1106 130K
R1101 3.3K
R1104 47K
4.4V
R1105 180K
C1110 0.0056
R1109 2.7K
R1112 22K
R1113 470
R1111 220K
1
2
3
4

Parts List

CAPACITORS

Symbol	Part No.	Description		
C1101	CEA 470P 25	Electrolytic	47	25V
C1102	CQMA 153K 50	Mylar	0.015	50V
C1103	CQMA 104K 50	Mylar	0.1	50V
C1105	CQMA 153K 50	Mylar	0.015	50V
C1106	CQMA 153K 50	Mylar	0.015	50V
C1107	CEA 330P 10	Electrolytic	33	10V
C1108	CEA 2R2P 50	Electrolytic	2.2	50V
C1109	CQMA 473K 50	Mylar	0.047	50V
C1110	CQMA 562K 50	Mylar	5600p	50V

RESISTORS

Symbol	Part No.	Description	
R1101	RD¼PS 332J	Carbon film	3.3k
R1102	RD¼PS 563J	Carbon film	56k
R1103	RD¼PS 752J	Carbon film	7.5k
R1104	RD¼PS 473J	Carbon film	47k
R1105	RD¼PS 184J	Carbon film	180k
R1106	RD¼PS 134J	Carbon film	130k
R1107	RD¼PS 681J	Carbon film	680
R1108	RD¼PS 680J	Carbon film	68
R1109	RD¼PS 272J	Carbon film	2.7k
R1110	RD¼PS 563J	Carbon film	56k
R1111	RD¼PS 224J	Carbon film	220k
R1112	RD¼PS 223J	Carbon film	22k
R1113	RD¼PSF 471J	Carbon film	470

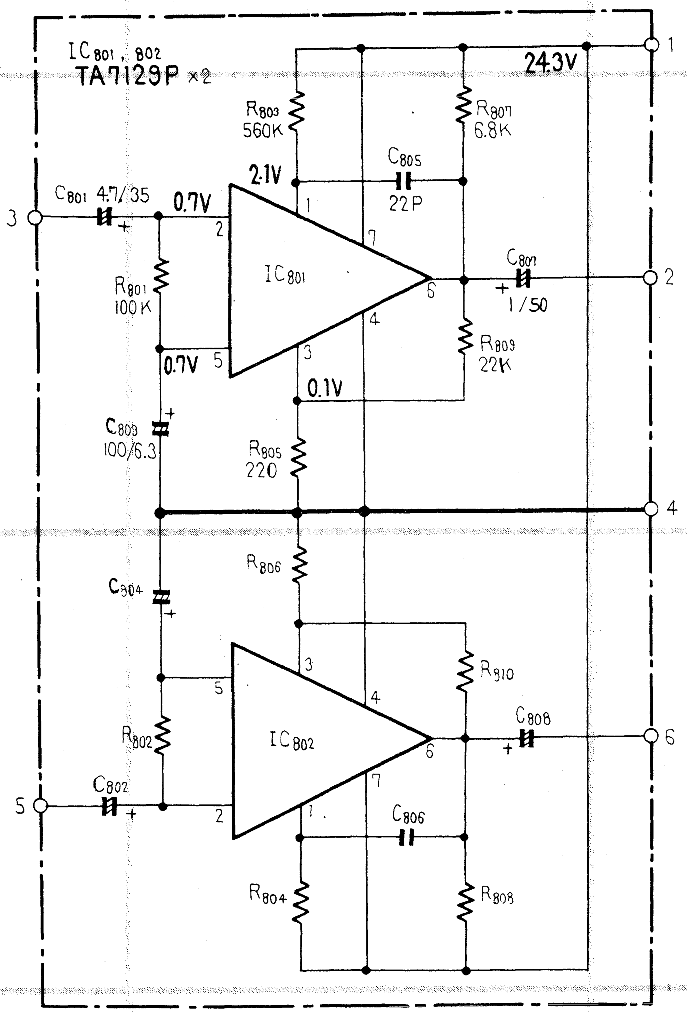
SEMICONDUCTORS

Symbol	Part No.	Description
Q1101	2SC711-E or F	Transistor
Q1102	2SC711-E or F	Transistor

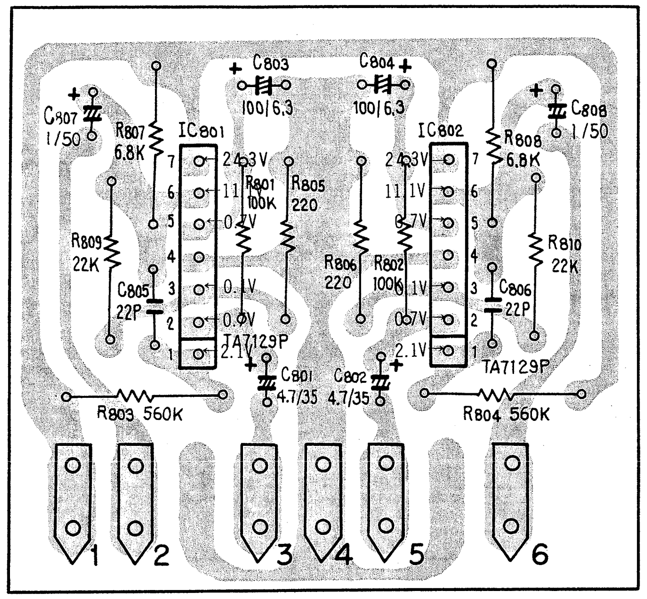
List of Changed Parts for Factory Modification

Symbol	Part No.	Description

9.17 FLAT AMPLIFIER ASSEMBLY (RWX-177)


IC801, 802
TA7129P ×2
24.3V
R803 560K
R807 6.8K
C805 22P
2.1V
C801 4.7/35
0.7V
IC801
C807 1/50
R801 100K
R809 22K
0.7V
0.1V
C803 100/6.3
R805 220
R806
C804
R810
C808
IC802
R802
C802
C806
R804
R808
1
2
3
4
5
6

Foil side


C803 100/6.3
C804 100/6.3
C807 1/50
R807 6.8K
IC801
IC802
R808 6.8K
C808 1/50
R801 100K
R805 220
R806 220
R802 100K
R809 22K
R810 22K
C805 22P
C806 22P
2.3V
11.1V
0.7V
0.1V
0.9V
2.1V
TA7129P
TA7129P
C801 4.7/35
C802 4.7/35
R803 560K
R804 560K
1
2
3
4
5
6

Parts List

CAPACITORS

Symbol	Part No.	Description		
C801	CEA R47P 50	Electrolytic	4.7	50V
C802	CEA R47P 50	Electrolytic	4.7	50V
C803	CEA 101P 6R3	Electrolytic	100	6.3V
C804	CEA 101P 6R3	Electrolytic	100	6.3V
C805	CCDSL 220K 50	Ceramic	22p	50V
C806	CCDSL 220K 50	Ceramic	22p	50V
C807	CEA 110P 50	Electrolytic	1	50V
C808	CEA 110P 50	Electrolytic	1	50V

RESISTORS

Symbol	Part No.	Description	
R801	RD¼PS 104J	Carbon film	100k
R802	RD¼PS 104J	Carbon film	100k
R803	RD¼PS 564J	Carbon film	560k
R804	RD¼PS 564J	Carbon film	560k
R805	RD¼PS 221J	Carbon film	220
R806	RD¼PS 221J	Carbon film	220
R807	RD¼PS 682J	Carbon film	6.8k
R808	RD¼PS 682J	Carbon film	6.8k
R809	RD¼PS 223J	Carbon film	22k
R810	RD¼PS 223J	Carbon film	22k

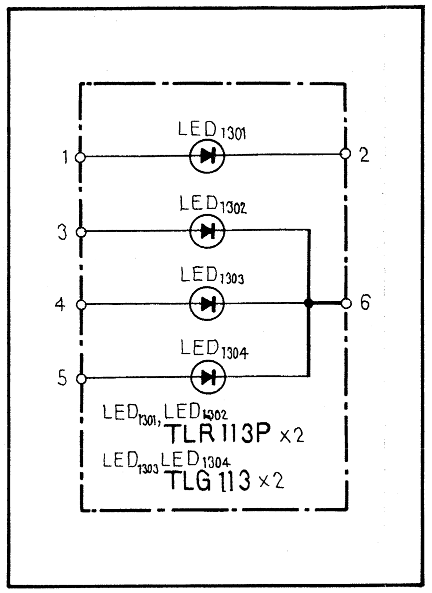
SEMICONDUCTORS

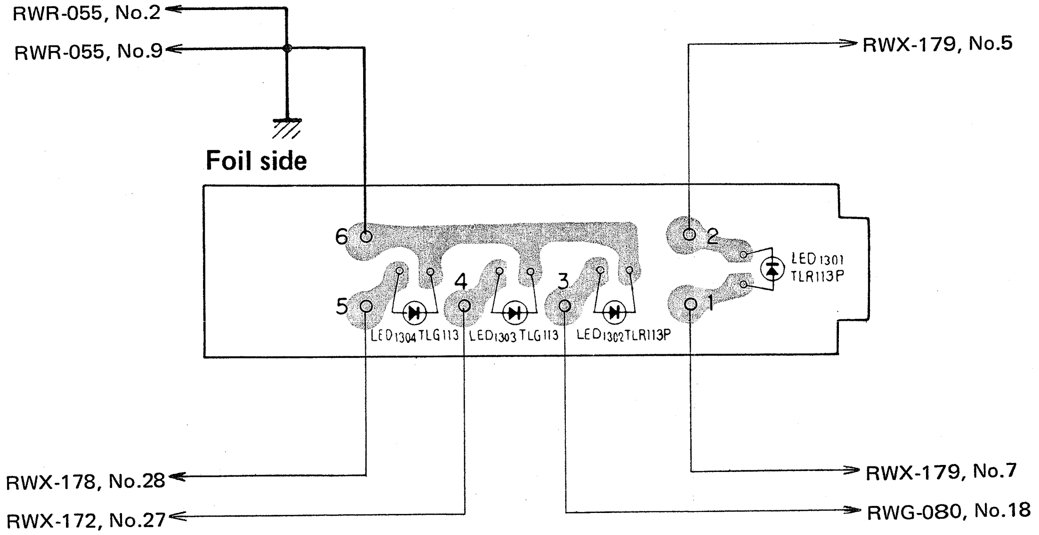
Symbol	Part No.	Description
IC801	TA 7129P	IC
IC802	TA 7129P	IC

List of Changed Parts for Factory Modification

Symbol	Part No.	Description

9.18 INDICATOR ASSEMBLY (RWX-176)


LED1301
LED1302
LED1303
LED1304
1
2
3
4
5
6
LED1301, LED1302 TLR113P ×2
LED1303, LED1304 TLG113 ×2


RWR-055, No.2
RWR-055, No.9
RWX-179, No.5
Foil side
6
2
4
3
5
1
LED1301 TLR113P
LED1304 TLG113
LED1303 TLG113
LED1302 TLR113P
RWX-178, No.28
RWX-172, No.27
RWX-179, No.7
RWG-080, No.18

Parts List

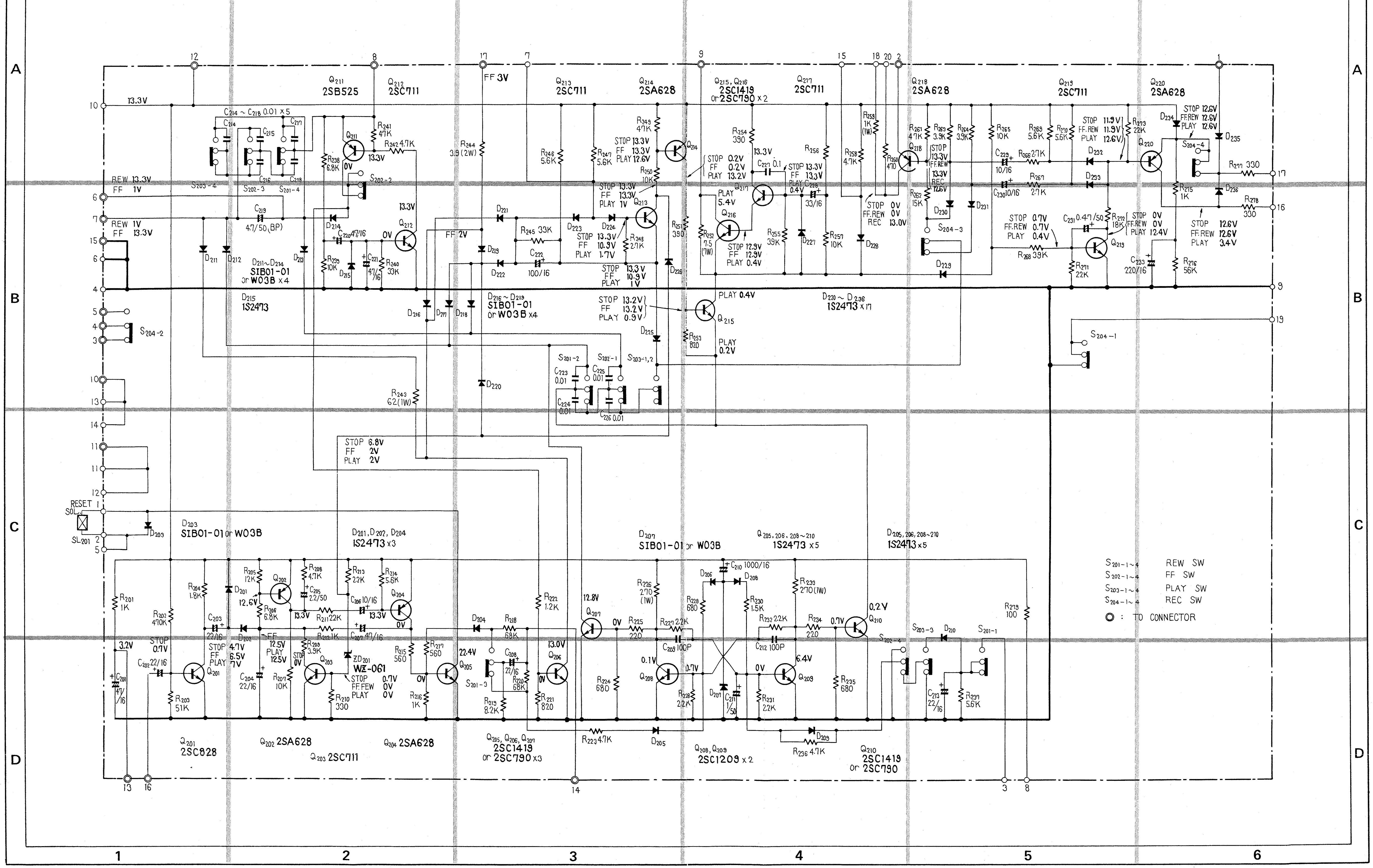
SEMICONDUCTORS

Symbol	Part No.	Description
LED1301	TLR-113P	Light emitting diode
LED1302	TLR-113P	Light emitting diode
LED1303	TLG-113	Light emitting diode
LED1304	TLG-113	Light emitting diode

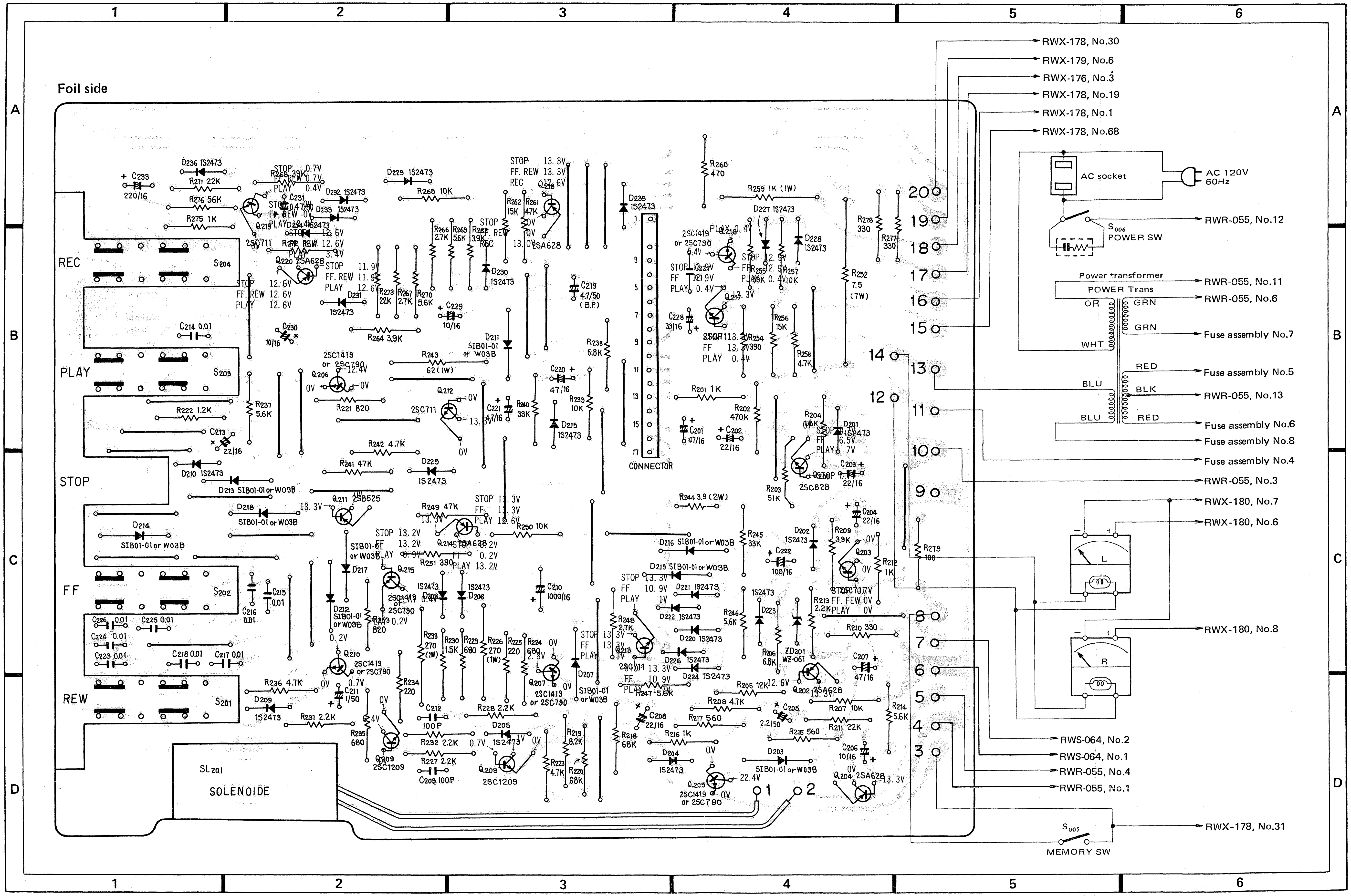
OTHER

Symbol	Part No.	Description
	REB-179	Diode Holder

12.19 CONTROL ASSEMBLY (RWG-080)



Q211 2SB525
Q212 2SC711
Q213 2SC711
Q214 2SA628
Q215, Q216 2SC1419 or 2SC790 x2
Q217 2SC711
Q218 2SA628
Q219 2SC711
Q220 2SA628
D211~D214 SIB01-01 or W03B x4
D215 1S2473
D216~D219 SIB01-01 or W03B x4
D220~D236 1S2473 x17
D203 SIB01-01 or W03B
D201, D202, D204 1S2473 x3
D207 SIB01-01 or W03B
D205, 206, 208~210 1S2473 x5
Q201 2SC828
Q202 2SA628
Q203 2SC711
Q204 2SA628
Q205, Q206, Q207 2SC1419 or 2SC790 x3
Q208, Q209 2SC1209 x2
Q210 2SC1419 or 2SC790
ZD201 WZ-061
REW 13.3V FF 1V
REW 1V FF 13.3V
STOP 6.8V FF 2V PLAY 2V
FF 3V
FF 2V
RESET SOL SL201
S201-1~4 REW SW
S202-1~4 FF SW
S203-1~4 PLAY SW
S204-1~4 REC SW
◎ : TO CONNECTOR



Foil side

REC
PLAY
STOP
FF
REW
S204
S203
S202
S201
SL201
SOLENOIDE
CONNECTOR
AC socket
AC 120V
60Hz
S006
POWER SW
Power transformer
POWER Trans
S005
MEMORY SW
RWX-178, No.30
RWX-179, No.6
RWX-176, No.3
RWX-178, No.19
RWX-178, No.1
RWX-178, No.68
RWR-055, No.12
RWR-055, No.11
RWR-055, No.6
Fuse assembly No.7
Fuse assembly No.5
RWR-055, No.13
Fuse assembly No.6
Fuse assembly No.8
Fuse assembly No.4
RWR-055, No.3
RWX-180, No.7
RWX-180, No.6
RWX-180, No.8
RWS-064, No.2
RWS-064, No.1
RWR-055, No.4
RWR-055, No.1
RWX-178, No.31
OR
GRN
WHT
RED
BLU
BLK
L
R

Parts List of Control Assembly (RWG-080)

CAPACITORS

Symbol	Part No.	Description		
C201	CEA 470P 16	Electrolytic	47	16V
C202	CEA 220P 16	Electrolytic	22	16V
C203	CEA 220P 16	Electrolytic	22	16V
C204	CEA 220P 16	Electrolytic	22	16V
C205	CEA 2R2P 50	Electrolytic	2.2	50V
C206	CEA 100P 16	Electrolytic	10	16V
C207	CEA 470P 16	Electrolytic	47	16V
C208	CEA 220P 16	Electrolytic	22	16V
C209	CCDSL 101K 50	Ceramic	100p	50V
C210	CEA 102P 16	Electrolytic	1000	16V
C211	CEA 010P 50	Electrolytic	1	50V
C212	CCDSL 101K 50	Ceramic	100p	50V
C213	CEA 220P 16	Electrolytic	22	16V
C214	CKDYF 103Z 50	Ceramic	0.01	50V
C215	CKDYF 103Z 50	Ceramic	0.01	50V
C216	CKDYF 103Z 50	Ceramic	0.01	50V
C217	CKDYF 103Z 50	Ceramic	0.01	50V
C218	CKDYF 103Z 50	Ceramic	0.01	50V
C219	RCH-026	Electrolytic	4.7	50V
C220	CEA 470P 16	Electrolytic	47	16V
C221	CEA 4R7P 35	Electrolytic	4.7	35V
C222	CEA 101P 16	Electrolytic	100	16V
C223	CKDYF 103Z 50	Ceramic	0.01	50V
C224	CKDYF 103Z 50	Ceramic	0.01	50V
C225	CKDYF 103Z 50	Ceramic	0.01	50V
C226	CKDYF 103Z 50	Ceramic	0.01	50V
C227	CQMA 104K 50	Mylar	0.1	50V
C228	CEA 330P 16	Electrolytic	33	16V
C229	CEA 100P 16	Electrolytic	10	16V
C230	CEA 100P 16	Electrolytic	10	16V
C231	CEA R47P 50	Electrolytic	0.47	50V
C233	CEA 221P 16	Electrolytic	220	16V

RESISTORS

Symbol	Part No.	Description		
R201	RD¼PS 102J	Carbon film	1k	
R202	RD¼PS 474J	Carbon film	470k	
R203	RD¼PS 513J	Carbon film	51k	
R204	RD¼PS 182J	Carbon film	1.8k	
R205	RD¼PS 123J	Carbon film	12k	
R206	RD¼PS 682J	Carbon film	6.8k	
R207	RD¼PS 103J	Carbon film	10k	
R208	RD¼PS 472J	Carbon film	4.7k	
R209	RD¼PS 392J	Carbon film	3.9k	
R210	RD¼PS 331J	Carbon film	330	
R211	RD¼PS 223J	Carbon film	22k	
R212	RD¼PS 102J	Carbon film	1k	
R213	RD¼PS 222J	Carbon film	2.2k	
R214	RD¼PS 562J	Carbon film	5.6k	
R215	RD¼PS 561J	Carbon film	560	
R216	RD¼PS 102J	Carbon film	1k	
R217	RD¼PS 561J	Carbon film	560	
R218	RD¼PS 683J	Carbon film	68k	
R219	RD¼PS 822J	Carbon film	8.2k	
R220	RD¼PS 683J	Carbon film	68k	
R221	RD¼PS 821J	Carbon film	820	
R222	RD¼PS 122J	Carbon film	1.2k	
R223	RD¼PS 472J	Carbon film	4.7k	
R224	RD¼PS 681J	Carbon film	680	
R225	RD¼PS 221J	Carbon film	220	
R226	RS1P 271J	Metal oxide	270	1W
R227	RD¼PS 222J	Carbon film	2.2k	
R228	RD¼PS 222J	Carbon film	2.2k	
R229	RD¼PS 681J	Carbon film	680	
R230	RD¼PS 152J	Carbon film	1.5k	
R231	RD¼PS 222J	Carbon film	2.2k	
R232	RD¼PS 222J	Carbon film	2.2k	
R233	RS1P 271J	Metal oxide	270	1W
R234	RD¼PS 221J	Carbon film	220	
R235	RD¼PS 681J	Carbon film	680	
R236	RD¼PS 472J	Carbon film	4.7k	
R237	RD¼PS 562J	Carbon film	5.6k	
R238	RD¼PS 682J	Carbon film	6.8k	
R239	RD¼PS 103J	Carbon film	10k	
R240	RD¼PS 333J	Carbon film	33k	
R241	RD¼PS 473J	Carbon film	47k	
R242	RD¼PS 472J	Carbon film	4.7k	
R243	RS1PSF 620J	Metal oxide	62	1W
R244	RCN-031	Wire wound resistor	3.9	2W
R245	RD¼PS 333J	Carbon film	33k	
R246	RD¼PS 562J	Carbon film	5.6k	
R247	RD¼PS 562J	Carbon film	5.6k	
R248	RD¼PS 272J	Carbon film	2.7k	
R249	RD¼PS 473J	Carbon film	47k	
R250	RD¼PS 103J	Carbon film	10k	
R251	RD¼PS 391J	Carbon film	390	
R252	RCN-032	Wire wound resistor	7.5	7W
R253	RD¼PS 821J	Carbon film	820	
R254	RD¼PS 391J	Carbon film	390	
R255	RD¼PS 393J	Carbon film	39k	
R256	RD¼PS 153J	Carbon film	15k	
R257	RD¼PS 103J	Carbon film	10k	
R258	RD¼PS 472J	Carbon film	4.7k	
R259	RS1P 102J	Metal oxide	1k	1W
R260	RD¼PS 471J	Carbon film	470	
R261	RD¼PS 473J	Carbon film	47k	
R262	RD¼PS 153J	Carbon film	15k	
R263	RD¼PS 392J	Carbon film	3.9k	
R264	RD¼PS 392J	Carbon film	3.9k	
R265	RD¼PS 103J	Carbon film	10k	
R266	RD¼PS 272J	Carbon film	2.7k	
R267	RD¼PS 272J	Carbon film	2.7k	
R268	RD¼PS 393J	Carbon film	39k	
R269	RD¼PS 562J	Carbon film	5.6k	
R270	RD¼PS 562J	Carbon film	5.6k	
R271	RD¼PS 223J	Carbon film	22k	
R272	RD¼PS 183J	Carbon film	18k	
R273	RD¼PS 223J	Carbon film	22k	
R275	RD¼PS 102J	Carbon film	1k	
R276	RD¼PS 563J	Carbon film	56k	
R277	RD¼PS 331J	Carbon film	330	
R278	RD¼PS 331J	Carbon film	330	
R279	RD¼PS 101J	Carbon film	100	

OTHERS

Symbol	Part No.	Description
SL201	RXP-032	Solenoid D
S201	RSG-055	Function switch
S202	RSG-055	Function switch
S203	RSG-055	Function switch
S204	RSG-055	Function switch
	RKP-033	Connector (17P)
	RNE-889	Release plate
	RBH-152	Release spring

SEMICONDUCTORS

Symbol	Part No.	Description
Q201	2SC828-S	Transistor
Q202	2SA628-E or F	Transistor
Q203	2SC711-E or F	Transistor
Q204	2SA628-E or F	Transistor
Q205	2SC1419-C or 2SC790-Y	Transistor
Q206	2SC1419-C or 2SC790-Y	Transistor
Q207	2SC1419-C or 2SC790-Y	Transistor
Q208	2SC1209-E	Transistor
Q209	2SC1209-E	Transistor
Q210	2SC1419-C or 2SC790-Y	Transistor
Q211	2SB525-D or E	Transistor
Q212	2SC711-E or F	Transistor
Q213	2SC711-E or F	Transistor
Q214	2SA628-E or F	Transistor
Q215	2SC1419-C or 2SC790-Y	Transistor
Q216	2SC1419-C or 2SC790-Y	Transistor
Q217	2SC711-E or F	Transistor
Q218	2SA628-E or F	Transistor
Q219	2SC711-E or F	Transistor
Q220	2SA628-E or F	Transistor
D201	1S2473	Diode
D202	1S2473	Diode
D203	SIB01-01 or W03B	Diode
D204	1S2473	Diode
D205	1S2473	Diode
D206	1S2473	Diode
D207	SIB01-01 or W03B	Diode
D208	1S2473	Diode
D209	1S2473	Diode
D210	1S2473	Diode
D211	SIB01-01 or W03B	Diode
D212	SIB01-01 or W03B	Diode
D213	SIB01-01 or W03B	Diode
D214	SIB01-01 or W03B	Diode
D215	1S2473	Diode
D216	SIB01-01 or W03B	Diode
D217	SIB01-01 or W03B	Diode
D218	SIB01-01 or W03B	Diode
D219	SIB01-01 or W03B	Diode

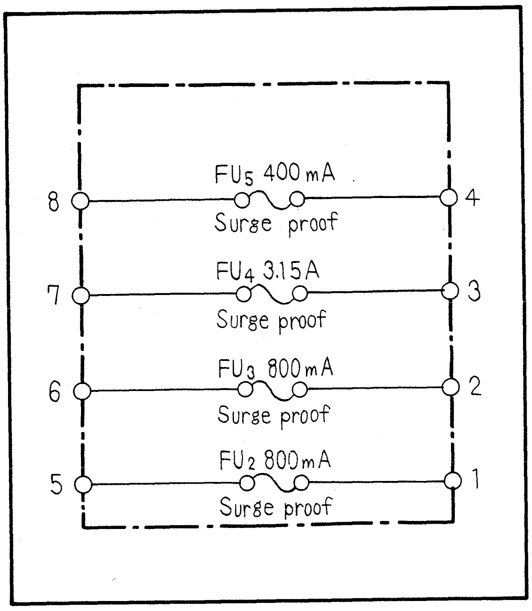
Symbol	Part No.	Description
D220	1S2473	Diode
D221	1S2473	Diode
D222	1S2473	Diode
D223	1S2473	Diode
D224	1S2473	Diode
D225	1S2473	Diode
D226	1S2473	Diode
D227	1S2473	Diode
D228	1S2473	Diode
D229	1S2473	Diode
D230	1S2473	Diode
D231	1S2473	Diode
D232	1S2473	Diode
D233	1S2473	Diode
D234	1S2473	Diode
D235	1S2473	Diode
D236	1S2473	Diode
ZD201	WZ-061	Zener Diode

List of Changed Parts for Factory Modification

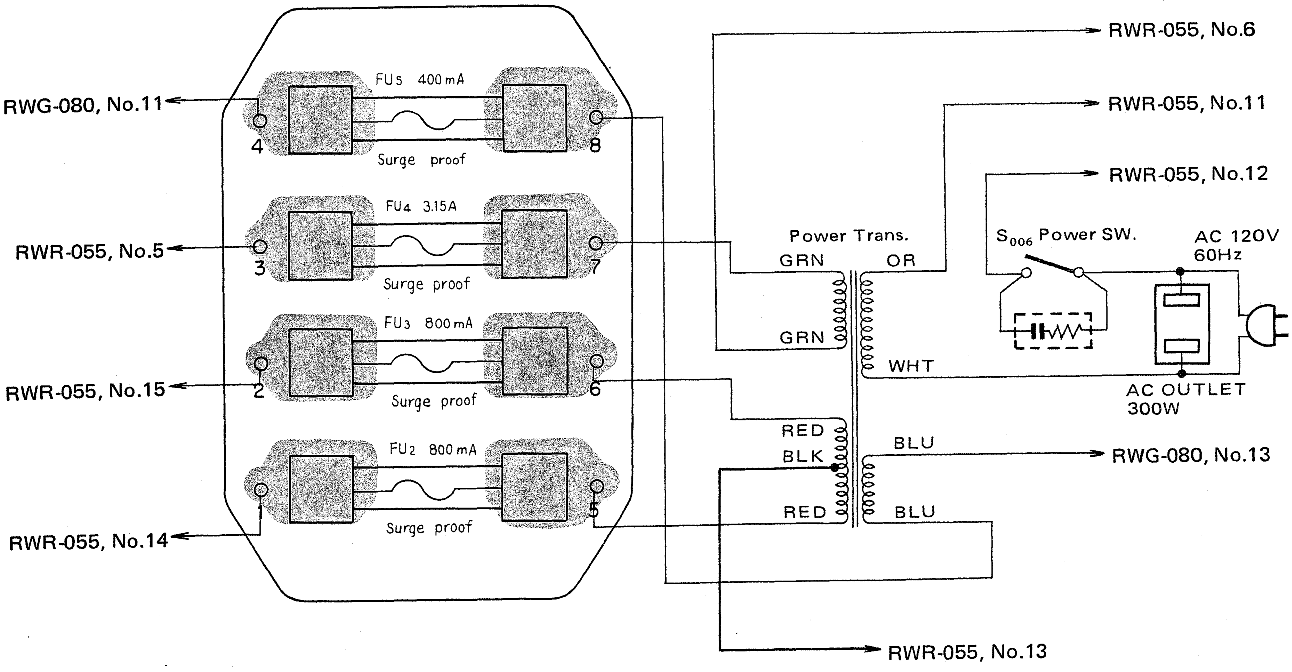
Symbol	Part No.	Description

Control assembly (RWG-080)

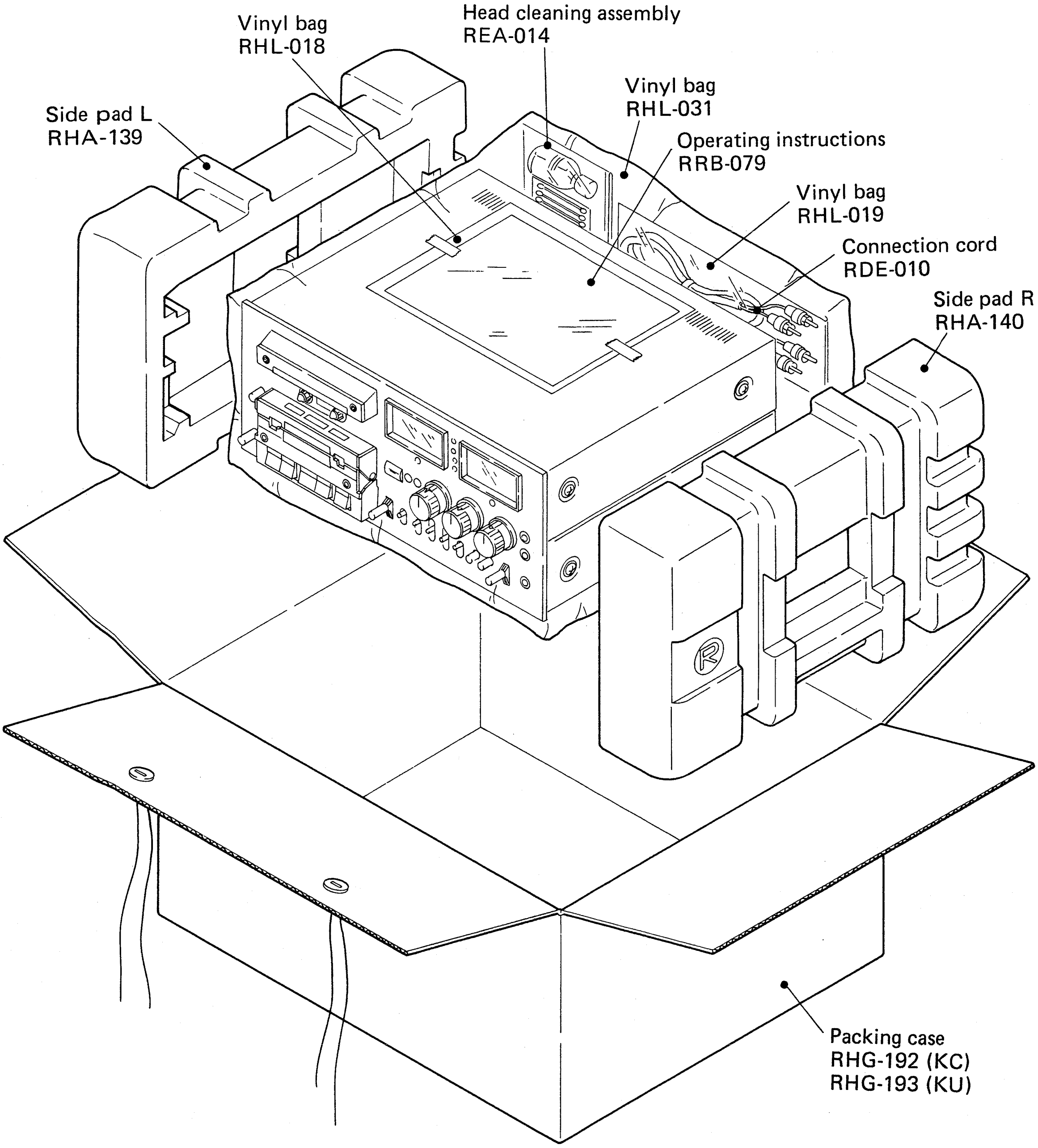
9.20 FUSE ASSEMBLY


FU5 400mA
Surge proof
FU4 3.15A
Surge proof
FU3 800mA
Surge proof
FU2 800mA
Surge proof
8
7
6
5
4
3
2
1

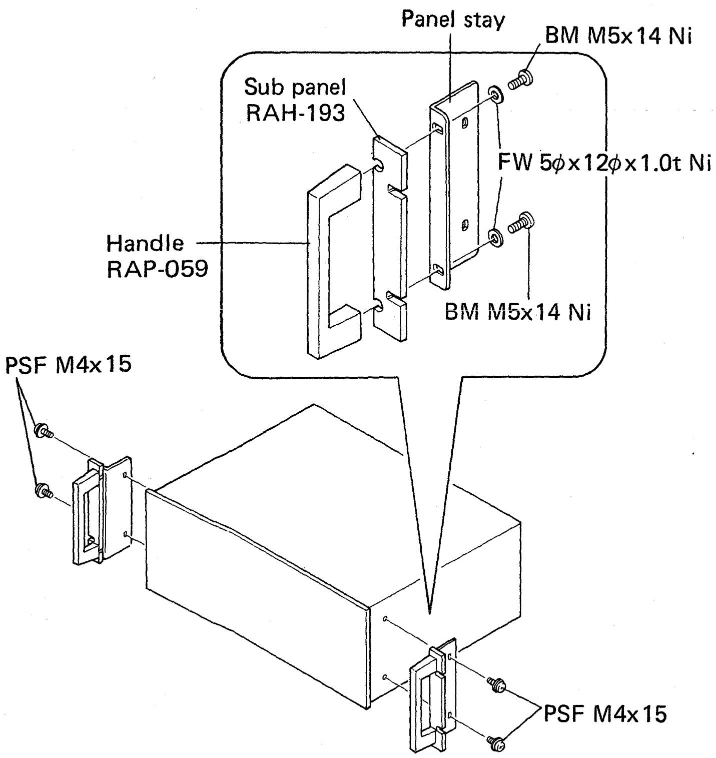
Foil side

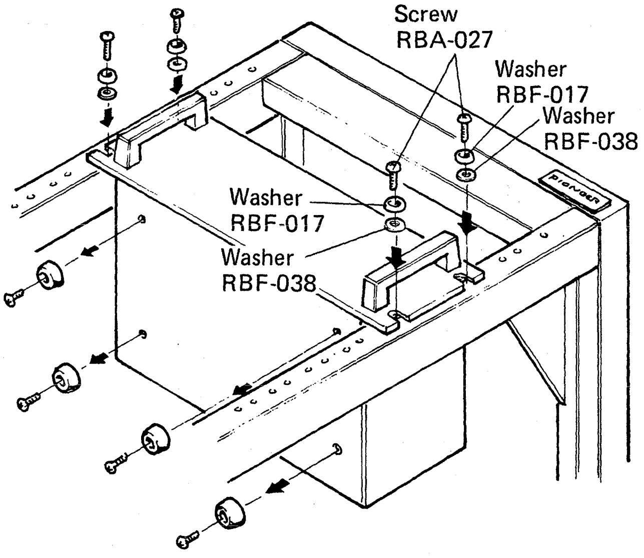

FU5 400mA
Surge proof
FU4 3.15A
Surge proof
FU3 800mA
Surge proof
FU2 800mA
Surge proof
4
3
2
1
8
7
6
5
RWG-080, No.11
RWR-055, No.5
RWR-055, No.15
RWR-055, No.14
RWR-055, No.6
RWR-055, No.11
RWR-055, No.12
Power Trans.
GRN
OR
GRN
WHT
RED
BLK
RED
BLU
BLU
S006 Power SW.
AC 120V
60Hz
AC OUTLET
300W
RWG-080, No.13
RWR-055, No.13

10. PACKING

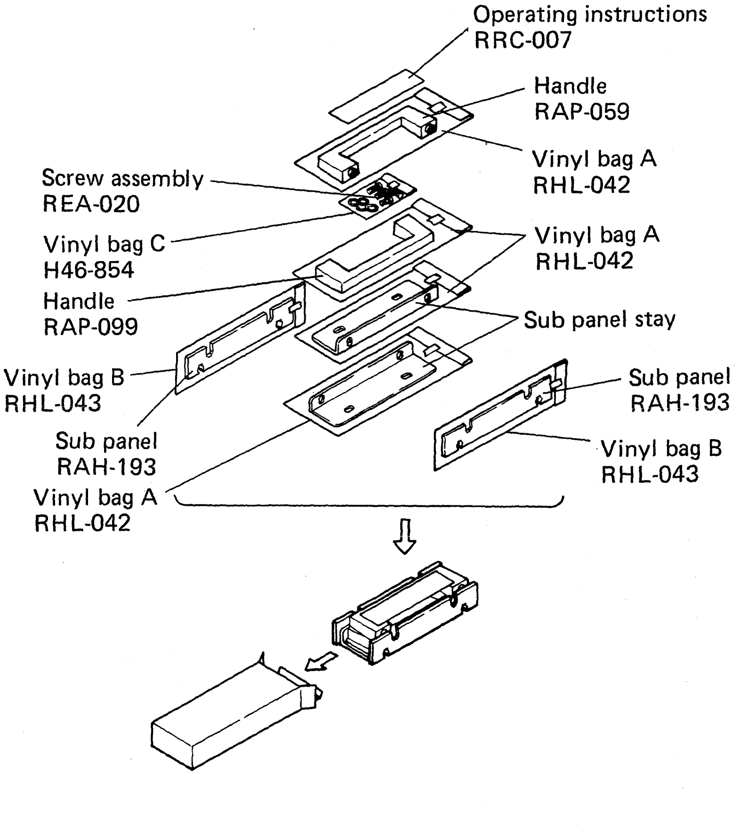

Vinyl bag
RHL-018
Head cleaning assembly
REA-014
Side pad L
RHA-139
Vinyl bag
RHL-031
Operating instructions
RRB-079
Vinyl bag
RHL-019
Connection cord
RDE-010
Side pad R
RHA-140
Packing case
RHG-192 (KC)
RHG-193 (KU)

11. RACK MOUNT ADAPTOR JA-R102(EIA STANDARDS)


Panel stay
BM M5x14 Ni
Sub panel
RAH-193
FW 5φx12φx1.0t Ni
Handle
RAP-059
BM M5x14 Ni
PSF M4x15
PSF M4x15


Screw
RBA-027
Washer
RBF-017
Washer
RBF-038
Washer
RBF-017
Washer
RBF-038

Packing


Operating instructions
RRC-007
Handle
RAP-059
Vinyl bag A
RHL-042
Screw assembly
REA-020
Vinyl bag C
H46-854
Vinyl bag A
RHL-042
Handle
RAP-099
Sub panel stay
Vinyl bag B
RHL-043
Sub panel
RAH-193
Sub panel
RAH-193
Vinyl bag B
RHL-043
Vinyl bag A
RHL-042

1. CONTRAST OF MISCELLANEOUS PARTS

SWITCHES

Symbol & Description	Part No.		
	KC, KU	D, D/G	HG
Power switch	RSA-016	RSA-014	RSA-017
Push switch	RSG-053	RSG-056	RSG-056

TRANSFORMER

Symbol & Description	Part No.		
	KC, KU	D, D/G	HG
Power transformer	RTT-117	RTT-122	RTT-126

CAPACITORS

Symbol & Description	Part No.		
	KC, KU	D, D/G	HG
C001 Ceramic 0.047 50V	CKDYF 473Z 50	←	←
C002 Ceramic 0.047 50V	CKDYF 473Z 50	←	←

RESISTORS

Symbol & Description	Part No.		
	KC, KU	D, D/G	HG
R001 Carbon film 2.2k	RD¼PS 222J	←	←
R002 Carbon film 2.2k	RD¼PS 222J	←	←

ASSEMBLIES

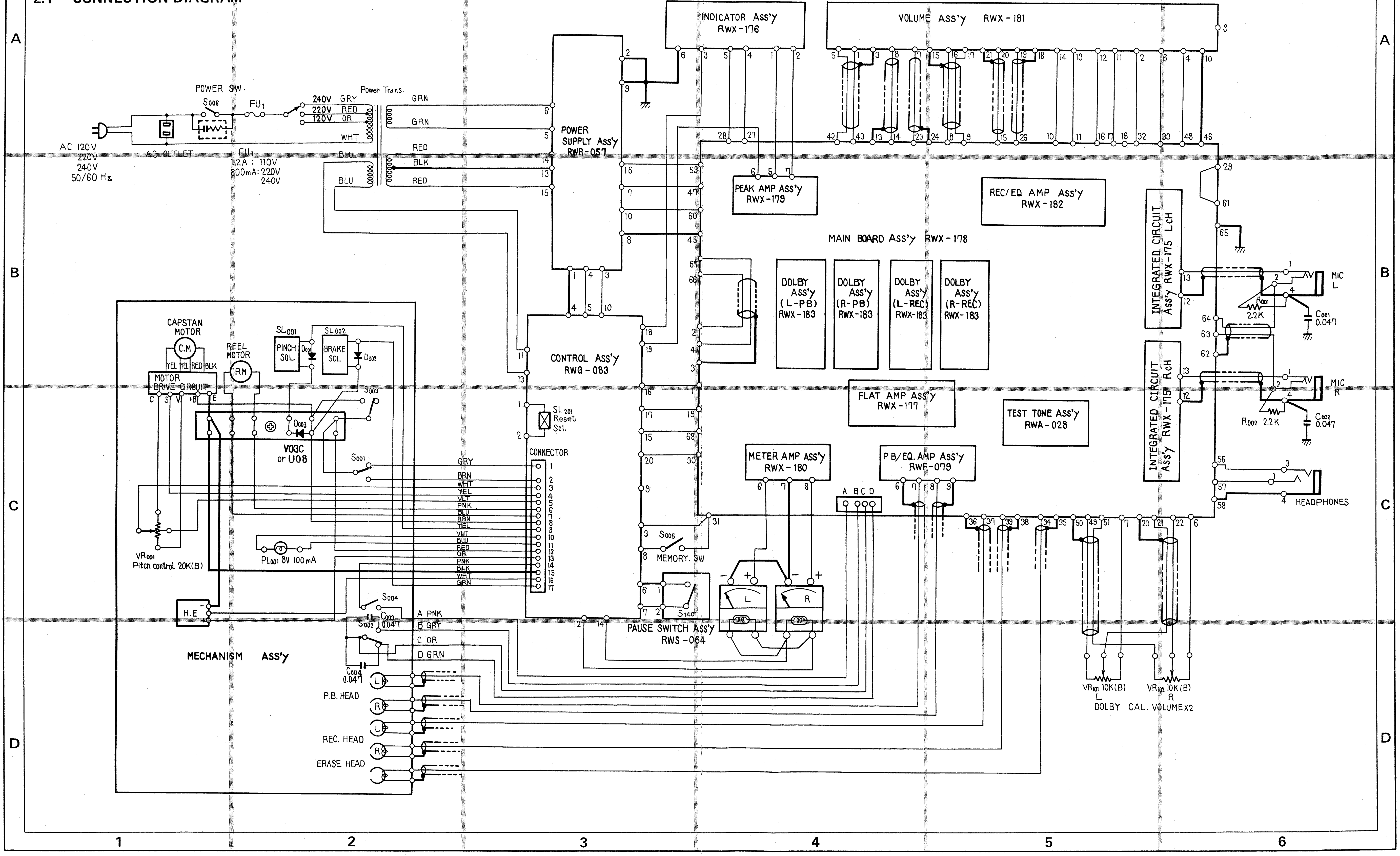
Symbol & Description	Part No.		
	KC, KU	D, D/G	HG
Main board assembly	RWX-178	←	←
Volume assembly	RWX-181	←	←
Indicator assembly	RWX-176	←	←
Power supply assembly	RWR-055	RWR-057	RWR-060
Control assembly	RWG-080	RWG-083	RWG-084
Pause switch assembly	RWS-064	←	←

OTHERS

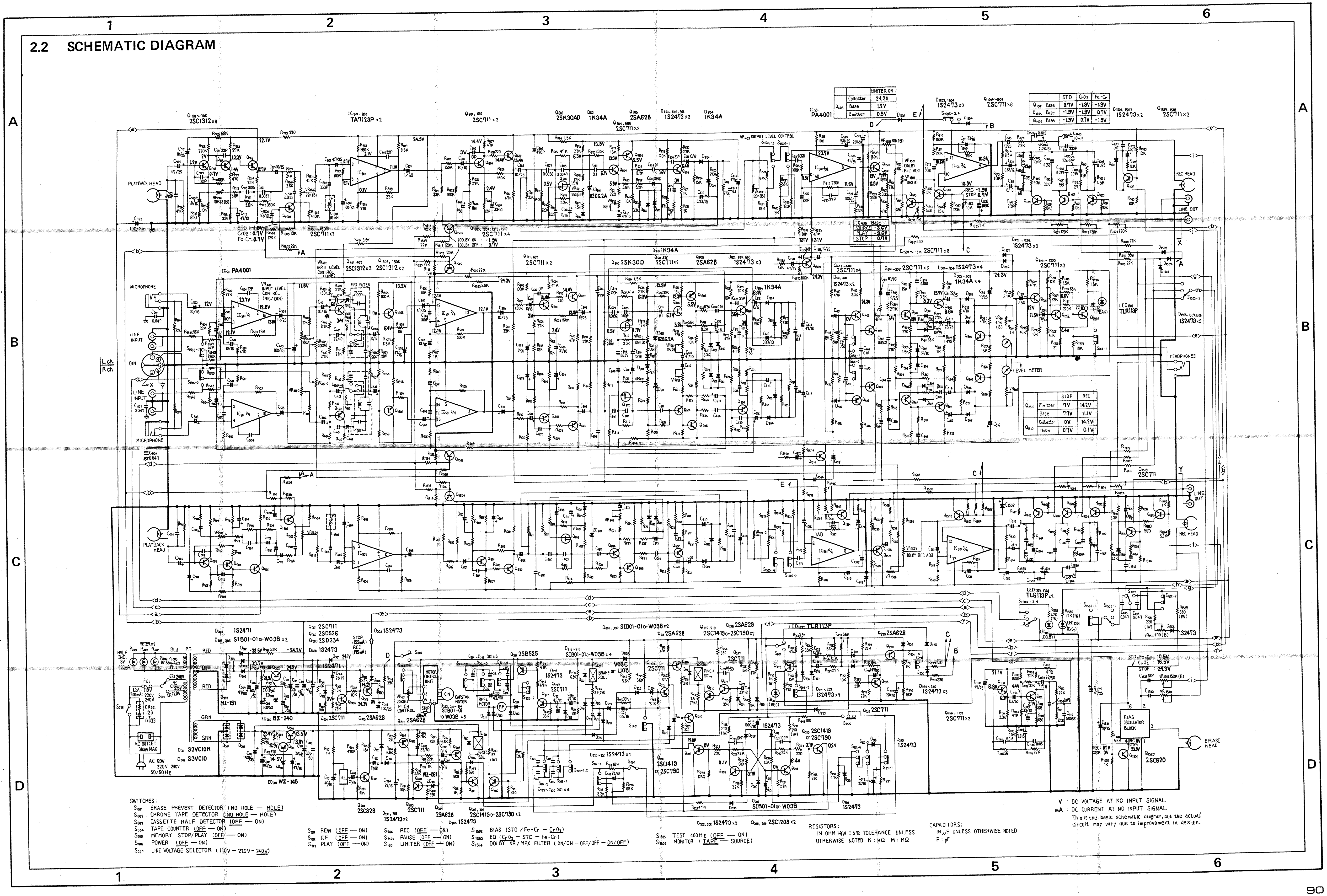
Symbol & Description	Part No.			Remarks
	KC, KU	D, D/G	HG	
Power cord	RDG-013 (KU)	RDG-004		
Line voltage selector	....	RKP-020	....	Switchable 3 voltage
Line voltage selector	....	....	RKR-019	Switchable 2 voltage
3 pin inlet	....	....	RKP-014	
2 pin terminal	....	....	AKC-021	
Packing case	RHG-192 (KC) RHG-193 (KU)	RHG-205 (D) RHG-202 (D/G)	RHG-207	
Operating instructions	RRB-079	RRB-083	RRB-083	English
			RRD-024	Germany/French
Spark killer	RWX-109 (KU) RWX-150 (KC)	RWX-110		
Vinyl bag C		H46-854		
Spacer A	....	RHC-059	....	
Spacer B	....	RHC-074	....	
Spacer C	....	RHC-075	....	
Spacer	....	RHC-073	....	For JA-R102

2. CT-F1000/D, D/G

2.1 CONNECTION DIAGRAM


1
2
3
4
5
6
A
B
C
D
INDICATOR Ass'y RWX-176
VOLUME Ass'y RWX-181
POWER SW.
S006
FU1
Power Trans.
240V GRY
220V RED
120V OR
GRN
WHT
RED
BLK
BLU
AC 120V 220V 240V 50/60 Hz
AC OUTLET
FU1 1.2A : 110V 800mA : 220V 240V
POWER SUPPLY Ass'y RWR-057
PEAK AMP Ass'y RWX-179
REC/EQ AMP Ass'y RWX-182
MAIN BOARD Ass'y RWX-178
DOLBY Ass'y (L-PB) RWX-183
DOLBY Ass'y (R-PB) RWX-183
DOLBY Ass'y (L-REC) RWX-183
DOLBY Ass'y (R-REC) RWX-183
INTEGRATED CIRCUIT Ass'y RWX-175 LcH
INTEGRATED CIRCUIT Ass'y RWX-175 RcH
MIC L
MIC R
R001 2.2K
C001 0.047
R002 2.2K
C002 0.047
HEADPHONES
CAPSTAN MOTOR
C.M
YEL YEL RED BLK
REEL MOTOR
RM
MOTOR DRIVE CIRCUIT
C S V +B E
SL001 PINCH SOL
D001
SL002 BRAKE SOL
D002
S003
D003
V03C or U08
S001
CONTROL Ass'y RWG-083
SL201 Reset Sol.
CONNECTOR
GRY BRN WHT YEL VLT PNK BLU BRN YEL VLT BLU RED OR PNK BLK WHT GRN
VR001 Pitch control 20K(B)
PL001 8V 100mA
H.E
S004
S002
C003 0.047
A PNK
B GRY
C OR
D GRN
C004 0.047
MECHANISM Ass'y
P.B. HEAD
REC. HEAD
ERASE HEAD
FLAT AMP Ass'y RWX-177
TEST TONE Ass'y RWA-028
METER AMP Ass'y RWX-180
P B/EQ. AMP Ass'y RWF-079
A B C D
S005 MEMORY. SW
S1401
PAUSE SWITCH Ass'y RWS-064
L
R
VR101 10K(B) L
VR102 10K(B) R
DOLBY CAL. VOLUME x2

2.2 SCHEMATIC DIAGRAM


1
2
3
4
5
6
A
B
C
D
PLAYBACK HEAD
MICROPHONE
LINE INPUT
DIN
Lch
Rch
REC HEAD
LINE OUT
HEADPHONES
LEVEL METER
ERASE HEAD
BIAS OSCILLATOR BLOCK
CAPSTAN MOTOR
MOTOR CONTROL UNIT
REEL MOTOR
PITCH CONTROL
BRAKE SOL.
PINCH SOL.
RESET SOL.
DOLBY REC ADJ
OUTPUT LEVEL CONTROL
INPUT LEVEL CONTROL (MIC/DIN)
INPUT LEVEL CONTROL (LINE)
MPX FILTER
LED TLR113P (PEAK)
LED TLG113P x2 (DOLBY)
IC501, 502 TA7129P x2
IC601 PA4001
IC401 PA4001
Q101, 1106 2SC1312 x6
Q601, 602 2SC711 x2
Q603 2SK30AD
D601 1K34A
Q605 2SA628
Q401 2SK30D
D401 1K34A
AC OUTLET 300W MAX
AC 120V 220V 240V 50/60Hz
METER & HALF IND.
FU
D301 S3VC10R
D302 S3VC10
ZD301 WZ-145
Q201 2SC828
Q203 2SC711
Q204 2SA628
Q205, 206 2SC1419 or 2SC790 x2
Q208, 209 2SC1209 x2
Q1520 2SC620

Q405	LIMITER ON
Collector	24.2V
Base	1.2V
Emitter	0.5V

	STD	CrO2	Fe-Cr
Q1001 Base	0.7V	-1.9V	-1.9V
Q1005 Base	-1.9V	0.7V	-1.9V
Q1006 Base	-1.9V	0.7V	-1.9V

Q405	Base
SOURCE	-3.6V
PLAY	-3.6V
STOP	0.7V

		STOP	REC
Q1511	Emitter	7V	14.2V
	Base	7.7V	11.1V
	Collector	0V	14.2V
Q1513	Base	0.7V	0.1V

SWITCHES:
S001 ERASE PREVENT DETECTOR (NO HOLE — HOLE)
S002 CHROME TAPE DETECTOR (NO HOLE — HOLE)
S003 CASSETTE HALF DETECTOR (OFF — ON)
S004 TAPE COUNTER (OFF — ON)
S005 MEMORY STOP/PLAY (OFF — ON)
S006 POWER (OFF — ON)
S007 LINE VOLTAGE SELECTOR (110V – 220V – 240V)

S201 REW (OFF — ON)
S202 F.F (OFF — ON)
S203 PLAY (OFF — ON)

S204 REC (OFF — ON)
S1401 PAUSE (OFF — ON)
S1501 LIMITER (OFF — ON)

S1502 BIAS (STD / Fe-Cr – CrO2)
S1503 EQ (CrO2 – STD – Fe-Cr)
S1504 DOLBY NR / MPX FILTER (ON/ON – OFF/OFF – ON/OFF)

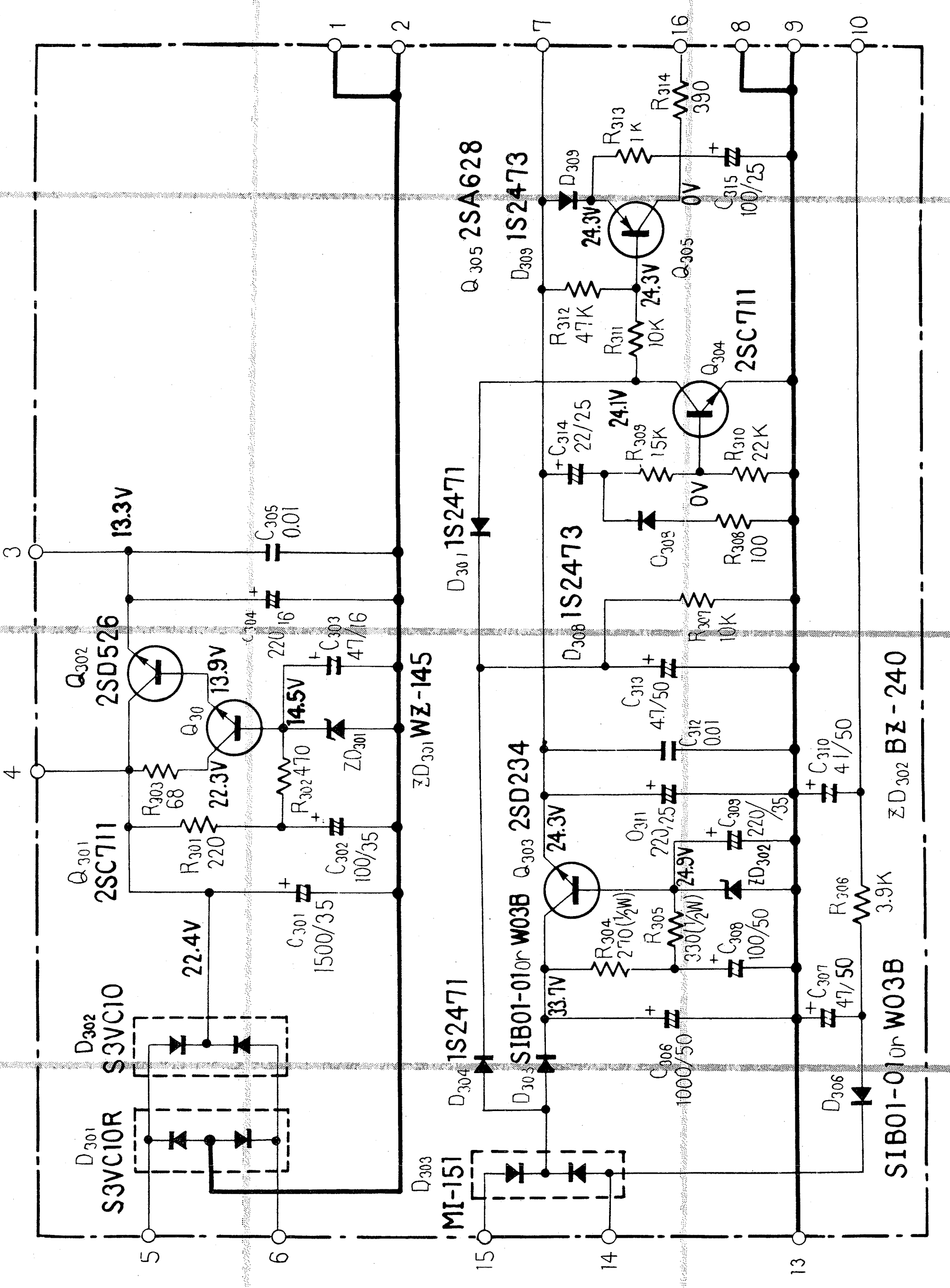
S1505 TEST 400Hz (OFF — ON)
S1506 MONITOR (TAPE — SOURCE)

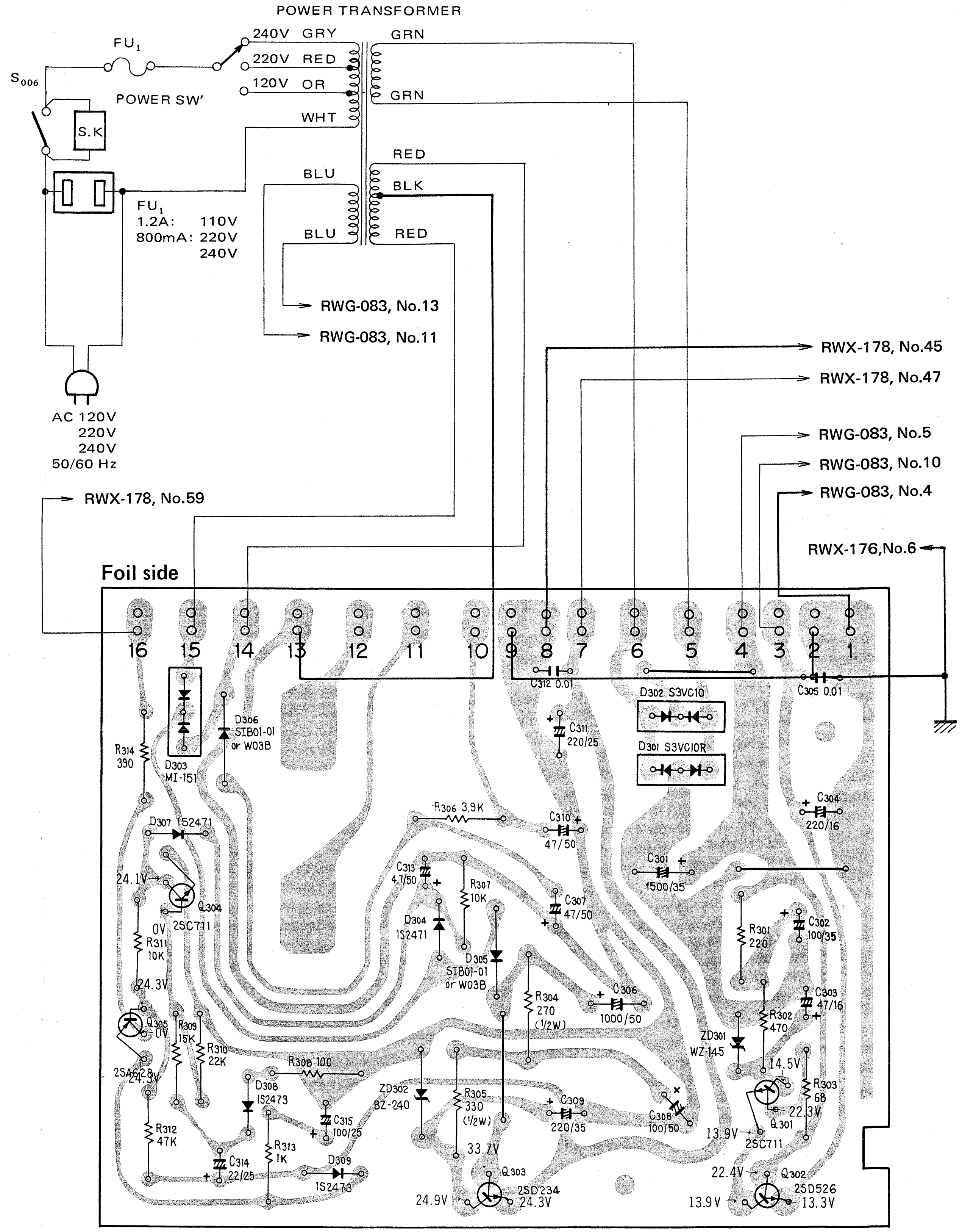
RESISTORS:
IN OHM 1/4W ±5% TOLERANCE UNLESS OTHERWISE NOTED K : kΩ M : MΩ

CAPACITORS:
IN μF UNLESS OTHERWISE NOTED
P : pF

V : DC VOLTAGE AT NO INPUT SIGNAL
mA : DC CURRENT AT NO INPUT SIGNAL
This is the basic schematic diagram, but the actual Circuit may vary due to improvoment in design.

2.3 POWER SUPPLY ASSEMBLY (RWR-057)


Q305 2SA628
D309 1S2473
R313 1K
R314 390
C315 100/25
R312 47K
R311 10K
Q304 2SC711
C314 22/25
R309 15K
R310 22K
D301 1S2471
D308 1S2473
C303
R308 100
R307 10K
C313 47/50
C312 0.01
C305 0.01
C304 220/16
C303 47/16
Q302 2SD526
Q301 2SC711
ZD301 WZ-145
ZD301
R303 68
R302 470
R301 220
C302 100/35
C301 1500/35
D302 S3VC10
D301 S3VC10R
Q303 2SD234
C311 220/25
C309 220/35
ZD302
R304 270(½W)
R305 330(½W)
C308 100/50
C306 1000/50
C310 47/50
C307 47/50
R306 3.9K
ZD302 BZ-240
D304 1S2471
D305 SIB01-01 or W03B
D306 SIB01-01 or W03B
D303 MI-151
13.3V
13.9V
14.5V
22.3V
22.4V
24.3V
24.1V
0V
24.9V
33.7V
1
2
3
4
5
6
7
8
9
10
13
14
15
16


POWER TRANSFORMER
FU1
S006
POWER SW'
S.K
240V GRY
220V RED
120V OR
WHT
GRN
GRN
RED
BLK
RED
BLU
BLU
FU1
1.2A: 110V
800mA: 220V
240V
AC 120V
220V
240V
50/60 Hz
RWG-083, No.13
RWG-083, No.11
RWX-178, No.45
RWX-178, No.47
RWG-083, No.5
RWG-083, No.10
RWG-083, No.4
RWX-178, No.59
RWX-176,No.6
Foil side
16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
C312 0.01
C305 0.01
D302 S3VC10
D301 S3VC10R
D306 SIB01-01 or W03B
D303 MI-151
R314 390
D307 1S2471
R306 3.9K
C311 220/25
C310 47/50
C304 220/16
C301 1500/35
C313 4.7/50
R307 10K
C307 47/50
Q304 2SC711
24.1V
0V
R311 10K
24.3V
D304 1S2471
D305 SIB01-01 or W03B
R301 220
C302 100/35
C303 47/16
R304 270 (½W)
C306 1000/50
R302 470
ZD301 WZ-145
Q305
2SA628
R309 15K
R310 22K
R308 100
D308 1S2473
C315 100/25
ZD302 BZ-240
R305 330 (½W)
C309 220/35
C308 100/50
14.5V
R303 68
22.3V
Q301 2SC711
13.9V
R312 47K
C314 22/25
R313 1K
D309 1S2473
33.7V
Q303 2SD234
24.9V
24.3V
22.4V
Q302 2SD526
13.9V
13.3V

Symbol	Part No.	Description
R256	RD¼PS 153J	Carbon film 15k
R257	RD¼PS 103J	Carbon film 10k
R258	RD¼PS 472J	Carbon film 4.7k
R259	RS1P 102J	Metal oxide 1k 1W
R260	RD¼PS 471J	Carbon film 470
R261	RD¼PS 473J	Carbon film 47k
R262	RD¼PS 153J	Carbon film 15k
R263	RD¼PS 392J	Carbon film 3.9k
R264	RD¼PS 392J	Carbon film 3.9k
R265	RD¼PS 103J	Carbon film 10k
R266	RD¼PS 272J	Carbon film 2.7k
R267	RD¼PS 272J	Carbon film 2.7k
R268	RD¼PS 393J	Carbon film 39k
R269	RD¼PS 562J	Carbon film 5.6k
R270	RD¼PS 562J	Carbon film 5.6k
R271	RD¼PS 223J	Carbon film 22k
R272	RD¼PS 183J	Carbon film 18k
R273	RD¼PS 223J	Carbon film 22k
R275	RD¼PS 102J	Carbon film 1k
R276	RD¼PS 563J	Carbon film 56k
R277	RD¼PS 331J	Carbon film 330
R278	RD¼PS 331J	Carbon film 330
R279	RD¼PSF 101J	Carbon film 100

OTHERS

Symbol	Part No.	Description
SL201	RXP-032	Solenoid D
S201	RSG-056	Function switch
S202	RSG-056	Function switch
S203	RSG-056	Function switch
S204	RSG-056	Function switch
	RKP-033	Connector (17P)
	RNE-889	Release plate
	RBH-152	Release spring

SEMICONDUCTORS

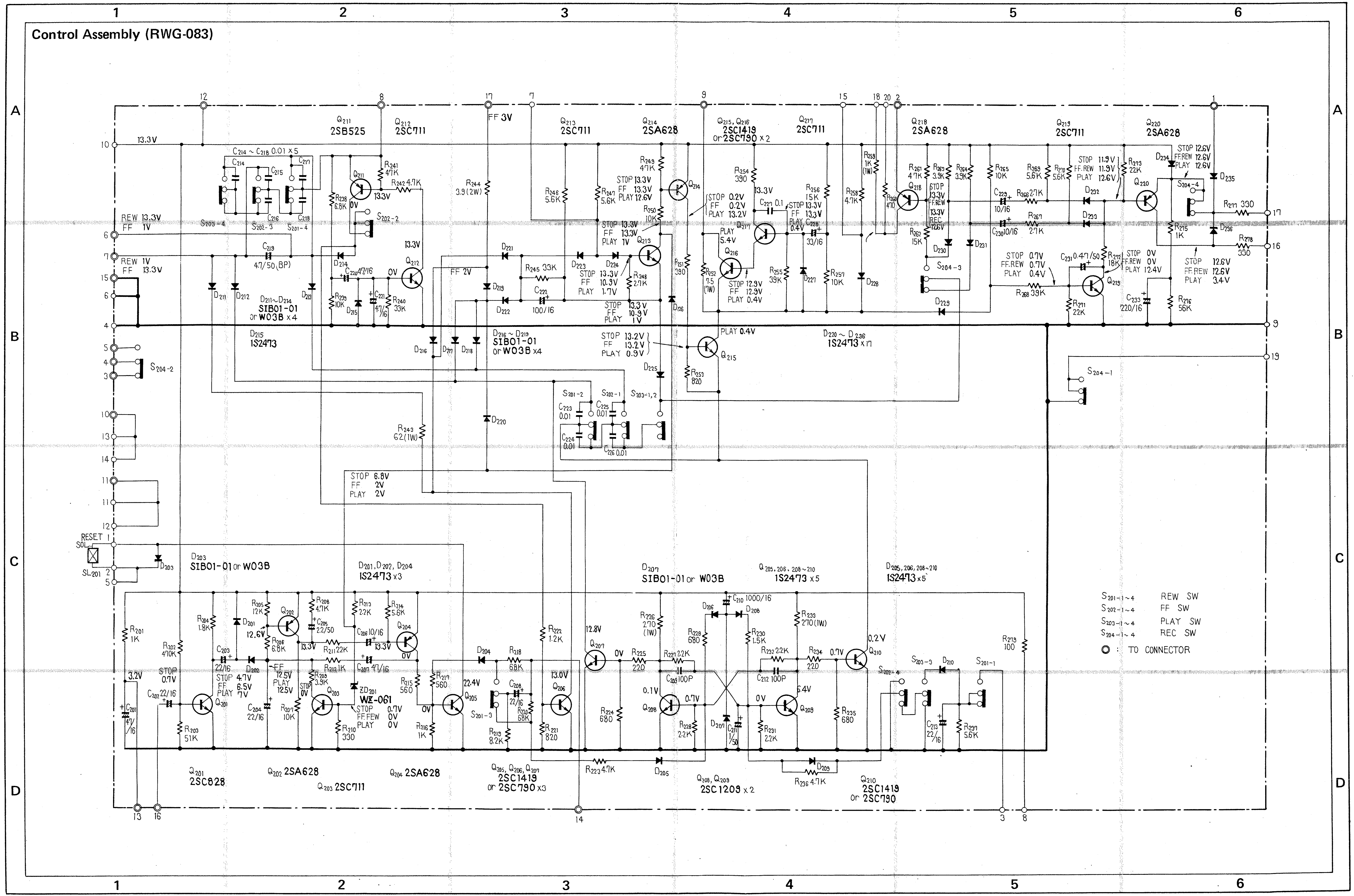
Symbol	Part No.	Description
Q201	2SC828-S	Transistor
Q202	2SA628-E or F	Transistor
Q203	2SC711-E or F	Transistor
Q204	2SA628-E or F	Transistor
Q205	2SC1419-C or 2SC790-Y	Transistor
Q206	2SC1419-C or 2SC790-Y	Transistor
Q207	2SC1419-C or 2SC790-Y	Transistor
Q208	2SC1209-E	Transistor
Q209	2SC1209-E	Transistor
Q210	2SC1419-C or 2SC790-Y	Transistor
Q211	2SB525-D or E	Transistor
Q212	2SC711-E or F	Transistor
Q213	2SC711-E or F	Transistor
Q214	2SA628-E or F	Transistor
Q215	2SC1419-C or 2SC790-Y	Transistor
Q216	2SC1419-C or 2SC790-Y	Transistor
Q217	2SC711-E or F	Transistor
Q218	2SA628-E or F	Transistor
Q219	2SC711-E or F	Transistor
Q220	2SA628-E or F	Transistor
D201	1S2473	Diode
D202	1S2473	Diode
D203	SIB01-01 or W03B	Diode
D204	1S2473	Diode
D205	1S2473	Diode
D206	1S2473	Diode
D207	SIB01-01 or W03B	Diode
D208	1S2473	Diode
D209	1S2473	Diode
D210	1S2473	Diode
D211	SIB01-01 or W03B	Diode
D212	SIB01-01 or W03B	Diode
D213	SIB01-01 or W03B	Diode
D214	SIB01-01 or W03B	Diode
D215	1S2473	Diode
D216	SIB01-01 or W03B	Diode
D217	SIB01-01 or W03B	Diode
D218	SIB01-01 or W03B	Diode
D219	SIB01-01 or W03B	Diode
D220	1S2473	Diode

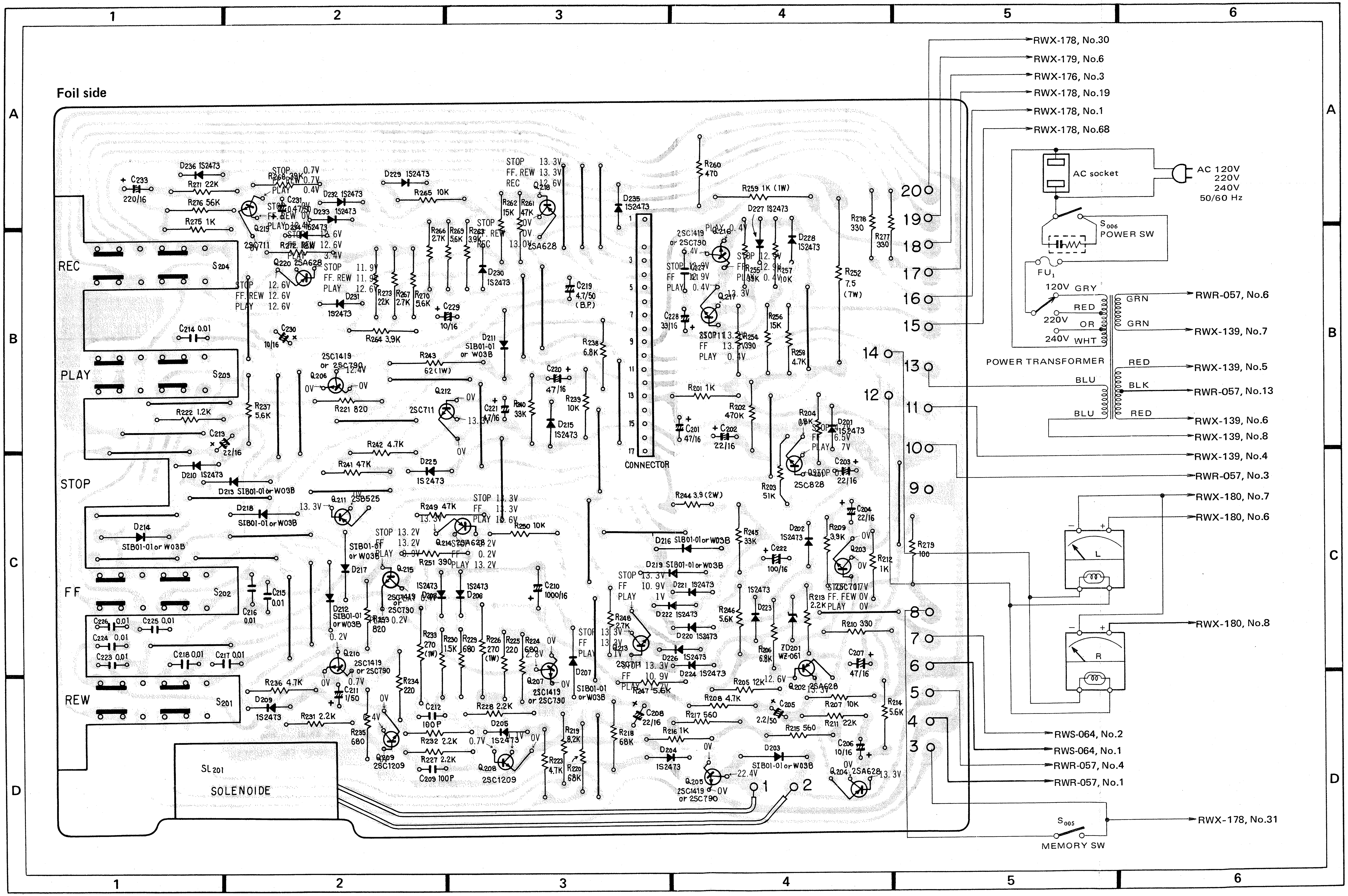
Symbol	Part No.	Description
D221	1S2473	Diode
D222	1S2473	Diode
D223	1S2473	Diode
D224	1S2473	Diode
D225	1S2473	Diode
D226	1S2473	Diode
D227	1S2473	Diode
D228	1S2473	Diode
D229	1S2473	Diode
D230	1S2473	Diode
D231	1S2473	Diode
D232	1S2473	Diode
D233	1S2473	Diode
D234	1S2473	Diode
D235	1S2473	Diode
D236	1S2473	Diode
ZD201	WZ-061	Zener Diode

List of Changed Parts for Factory Modification

Symbol	Part No.	Description

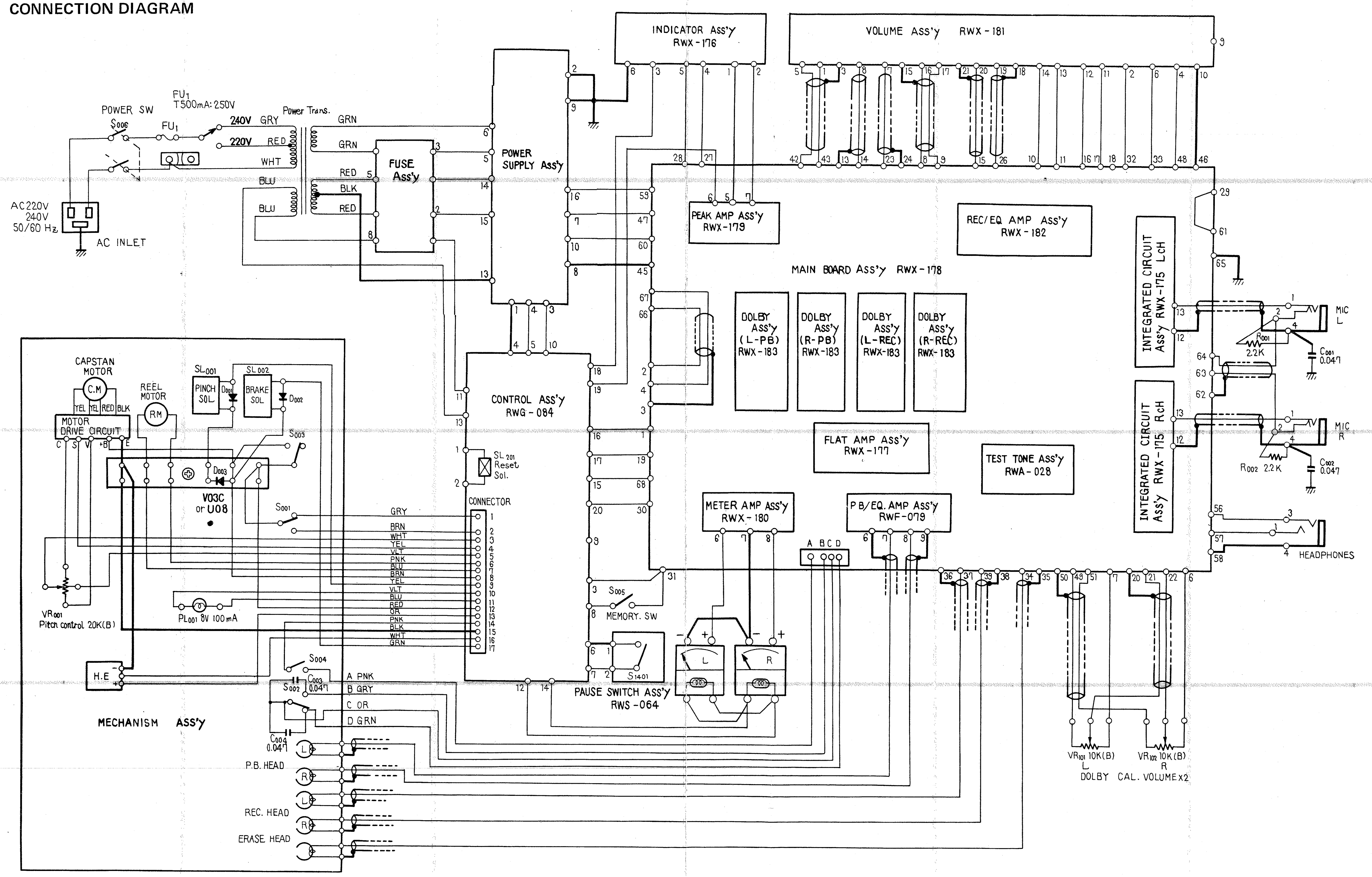
Control Assembly (RWG-083)


Q211 2SB525
Q212 2SC711
Q213 2SC711
Q214 2SA628
Q215, Q216 2SC1419 or 2SC790 ×2
Q217 2SC711
Q218 2SA628
Q219 2SC711
Q220 2SA628
D211~D214 SIB01-01 or W03B ×4
D215 1S2473
D216~D219 SIB01-01 or W03B ×4
D220 ~ D236 1S2473 ×17
D203 SIB01-01 or W03B
D201, D202, D204 1S2473 ×3
D207 SIB01-01 or W03B
Q205, 206, 208~210 1S2473 ×5
D205, 206, 208~210 1S2473 ×5
Q201 2SC828
Q202 2SA628
Q203 2SC711
Q204 2SA628
Q205, Q206, Q207 2SC1419 or 2SC790 ×3
Q208, Q209 2SC1208 ×2
Q210 2SC1419 or 2SC790
ZD201 WZ-061
RESET SOL
SL201
REW 13.3V
FF 1V
REW 1V
FF 13.3V
STOP 6.8V
FF 2V
PLAY 2V
STOP 13.2V
FF 13.2V
PLAY 0.9V
PLAY 0.4V
C214 ~ C218 0.01 ×5
S201-1~4 REW SW
S202-1~4 FF SW
S203-1~4 PLAY SW
S204-1~4 REC SW
◎ : TO CONNECTOR
1
2
3
4
5
6
A
B
C
D

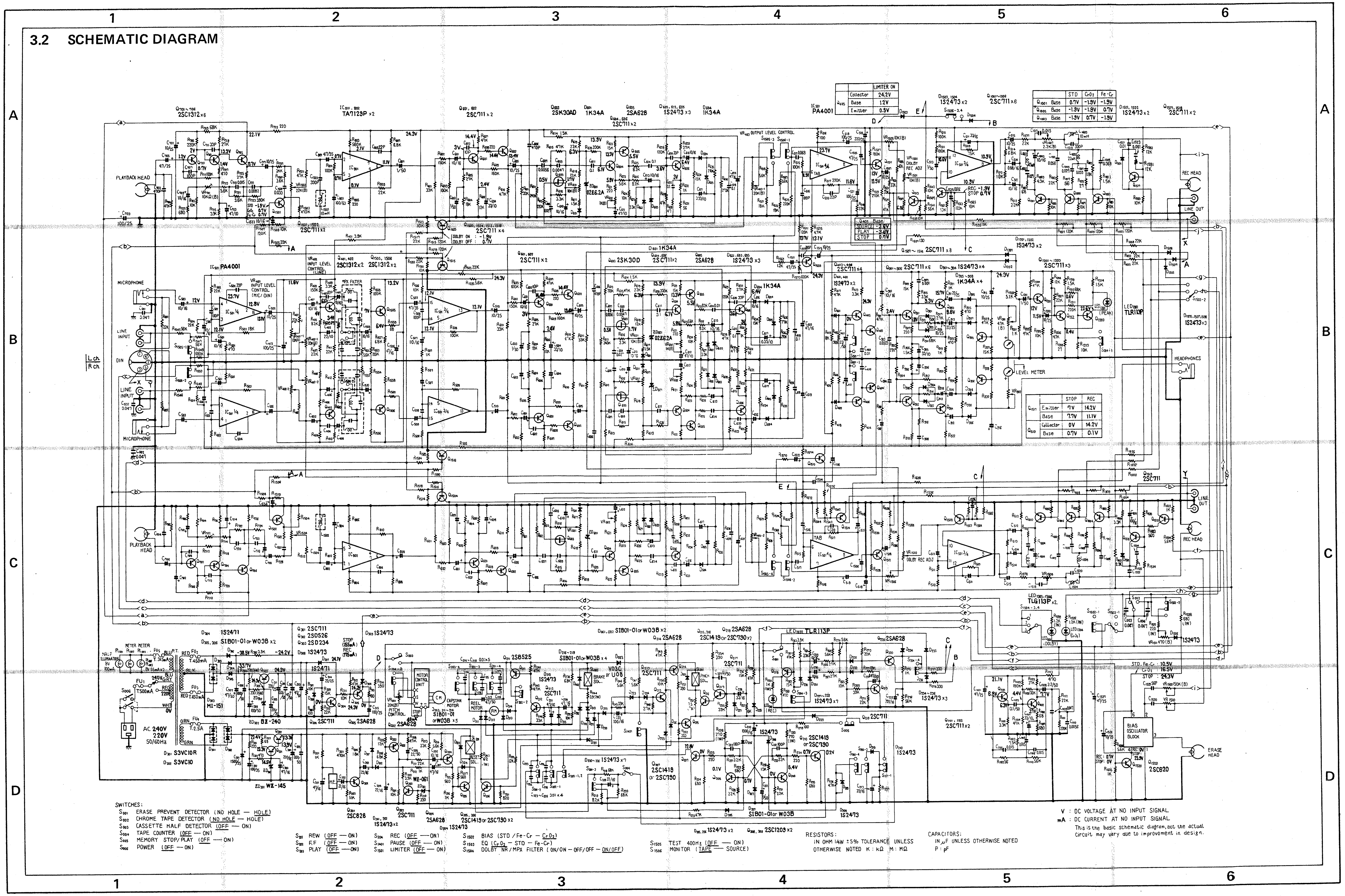

Foil side
REC
S204
PLAY
S203
STOP
FF
S202
REW
S201
SL201
SOLENOIDE
CONNECTOR
AC socket
AC 120V
220V
240V
50/60 Hz
S006
POWER SW
FU1
120V GRY
RED
220V
OR
240V
WHT
GRN
GRN
POWER TRANSFORMER
RED
BLU
BLK
BLU
RED
L
R
S005
MEMORY SW
RWX-178, No.30
RWX-179, No.6
RWX-176, No.3
RWX-178, No.19
RWX-178, No.1
RWX-178, No.68
RWR-057, No.6
RWX-139, No.7
RWX-139, No.5
RWR-057, No.13
RWX-139, No.6
RWX-139, No.8
RWX-139, No.4
RWR-057, No.3
RWX-180, No.7
RWX-180, No.6
RWX-180, No.8
RWS-064, No.2
RWS-064, No.1
RWR-057, No.4
RWR-057, No.1
RWX-178, No.31
1
2
3
4
5
6
A
B
C
D

3. CT-F1000/HG

3.1 CONNECTION DIAGRAM


INDICATOR Ass'y RWX-176
VOLUME Ass'y RWX-181
POWER SW S006
FU1 T500mA 250V
Power Trans.
240V GRY
220V RED
WHT
BLU
GRN
RED
BLK
FUSE Ass'y
POWER SUPPLY Ass'y
AC220V 240V 50/60 Hz
AC INLET
PEAK AMP Ass'y RWX-179
REC/EQ AMP Ass'y RWX-182
MAIN BOARD Ass'y RWX-178
DOLBY Ass'y (L-PB) RWX-183
DOLBY Ass'y (R-PB) RWX-183
DOLBY Ass'y (L-REC) RWX-183
DOLBY Ass'y (R-REC) RWX-183
INTEGRATED CIRCUIT Ass'y RWX-175 LcH
INTEGRATED CIRCUIT Ass'y RWX-175 RcH
MIC L
MIC R
R001 2.2K
C001 0.047
R002 2.2K
C002 0.047
HEADPHONES
FLAT AMP Ass'y RWX-177
TEST TONE Ass'y RWA-028
METER AMP Ass'y RWX-180
PB/EQ. AMP Ass'y RWF-079
A B C D
CONTROL Ass'y RWG-084
SL201 Reset Sol.
CONNECTOR
CAPSTAN MOTOR
C.M
REEL MOTOR
RM
MOTOR DRIVE CIRCUIT
SL001 PINCH SOL.
SL002 BRAKE SOL.
D001
D002
D003
S003
V03C or U08
S001
VR001 Pitch control 20K(B)
PL001 8V 100mA
H.E
S004
S002
C003 0.047
C004 0.047
A PNK
B GRY
C OR
D GRN
GRY BRN WHT YEL VLT PNK BLU BRN YEL VLT BLU RED OR PNK BLK WHT GRN
S005
MEMORY. SW
PAUSE SWITCH Ass'y RWS-064
S1401
L
R
MECHANISM Ass'y
P.B. HEAD
REC. HEAD
ERASE HEAD
VR101 10K(B) L
VR102 10K(B) R
DOLBY CAL. VOLUME x2

3.2 SCHEMATIC DIAGRAM


1
2
3
4
5
6
A
B
C
D
PLAYBACK HEAD
MICROPHONE
LINE INPUT
DIN
LINE OUTPUT
REC HEAD
LINE OUT
HEADPHONES
LEVEL METER
ERASE HEAD
BIAS OSCILLATOR BLOCK
CAPSTAN MOTOR
REEL MOTOR
MOTOR CONTROL UNIT
PITCH CONTROL
BRAKE SOL.
PINCH SOL.
RESET SOL.
H.E.
IC501 PA4001
IC801, 802 TA7123P x2
Q101~106 2SC1312 x6
Q601, 602 2SC711 x2
Q603 2SK30AD
D601 1K34A
Q605 2SA628
Q1001~1006 2SC711 x6
D1501, 1502 1S2473 x2
D1503, 1504 1S2473 x2
Q1520 2SC620
AC 240V 220V 50/60Hz
D301 S3VC10R
D302 S3VC10
ZD301 WZ-145
Q201 2SC828
Q203 2SC711
Q204 2SA628
Q205, 206 2SC1419 or 2SC790 x2
D201, 202 1S2473 x2
D204 1S2473
D205, 206 1S2473 x2
Q208, 209 2SC1209 x2
D207 SIB01-01 or W03B
D209 1S2473
D210 1S2473
D220~226 1S2473 x7
Q207 2SC1418 or 2SC790
LED TLR113P
TLG113P
TLR113P

		LIMITER ON
Q405	Collector	24.2V
	Base	1.2V
	Emitter	0.5V

	STD	CrO2	Fe-Cr
Q1001 Base	0.7V	-1.9V	-1.9V
Q1005 Base	-1.9V	-1.9V	0.7V
Q1003 Base	-1.9V	0.7V	-1.9V

Q405 Base	
SOURCE	-3.6V
PLAY	-3.6V
STOP	0.7V

		STOP	REC
Q1517	Emitter	7V	14.2V
	Base	7.7V	11.1V
Q1519	Collector	0V	14.2V
	Base	0.7V	0.1V

SWITCHES:

S_{001} ERASE PREVENT DETECTOR (NO HOLE — HOLE)
S_{002} CHROME TAPE DETECTOR (NO HOLE — HOLE)
S_{003} CASSETTE HALF DETECTOR (OFF — ON)
S_{004} TAPE COUNTER (OFF — ON)
S_{005} MEMORY STOP/PLAY (OFF — ON)
S_{006} POWER (OFF — ON)

S_{201} REW (OFF — ON)
S_{202} F.F (OFF — ON)
S_{203} PLAY (OFF — ON)

S_{204} REC (OFF — ON)
S_{1401} PAUSE (OFF — ON)
S_{1501} LIMITER (OFF — ON)

S_{1502} BIAS (STD / Fe-Cr — CrO$_2$)
S_{1503} EQ (CrO$_2$ — STD — Fe-Cr)
S_{1504} DOLBY NR / MPX FILTER (ON/ON — OFF/OFF — ON/OFF)

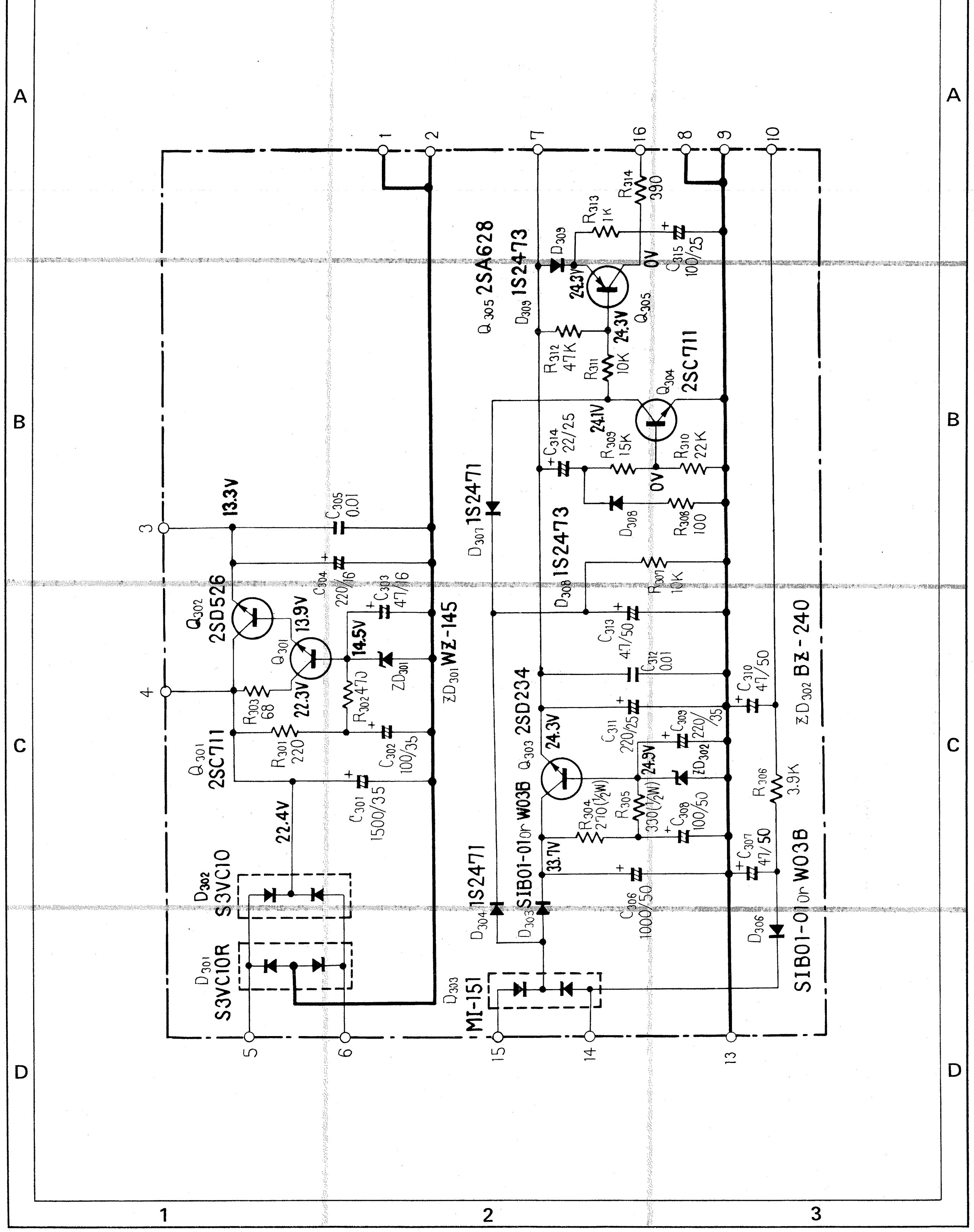
S_{1505} TEST 400Hz (OFF — ON)
S_{1506} MONITOR (TAPE — SOURCE)

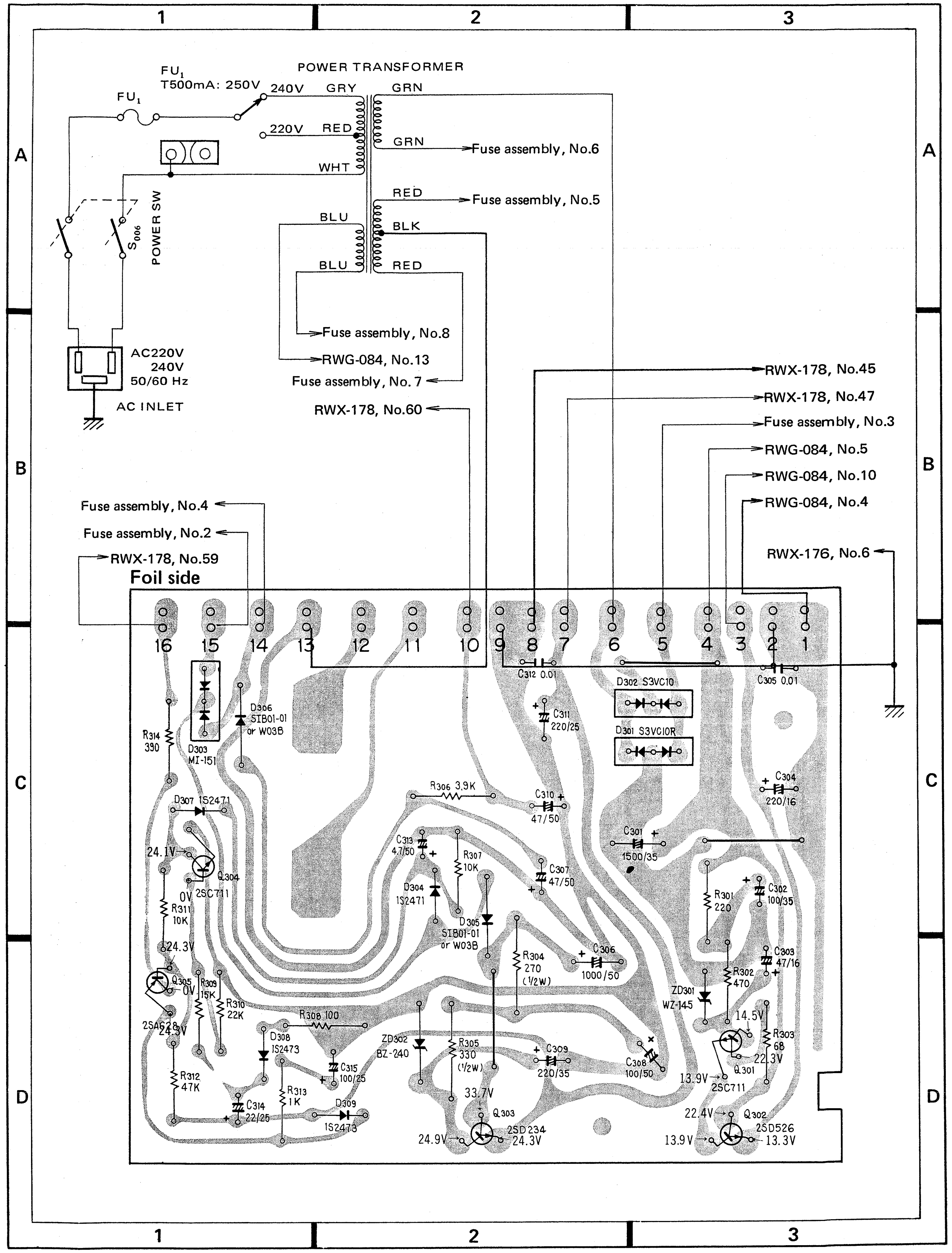
RESISTORS:
IN OHM 1/4W ±5% TOLERANCE UNLESS
OTHERWISE NOTED K : kΩ M : MΩ

CAPACITORS:
IN μF UNLESS OTHERWISE NOTED
P : pF

V : DC VOLTAGE AT NO INPUT SIGNAL
mA : DC CURRENT AT NO INPUT SIGNAL
This is the basic schematic diagram, but the actual Circuit may vary due to improvement in design.

3.3 POWER SUPPLY ASSEMBLY (RWR-060)


1
2
3
A
B
C
D
1
2
7
16
8
9
10
3
4
5
6
15
14
13
13.3V
Q302 2SD526
Q301 2SC711
13.9V
22.3V
14.5V
22.4V
R303 68
R301 220
R302 470
C305 0.01
C304 220/16
C303 47/16
C302 100/35
C301 1500/35
ZD301 WZ-145
D302 S3VC10
D301 S3VC10R
D303 MI-151
D304 1S2471
D305 SIB01-01 or W03B
D306 SIB01-01 or W03B
D307 1S2471
D308 1S2473
D309 1S2473
Q305 2SA628
Q304 2SC711
Q303 2SD234
24.3V
24.1V
0V
24.9V
33.7V
R314 390
R313 1K
R312 47K
R311 10K
R309 15K
R310 22K
R308 100
R307 10K
R306 3.9K
R305 330(1/2W)
R304 270(1/2W)
C315 100/25
C314 22/25
C313 47/50
C312 0.01
C311 220/25
C309 220/35
C310 47/50
C307 47/50
C308 100/50
C306 1000/50
ZD302 BZ-240


1
2
3
A
B
C
D
FU1
FU1 T500mA: 250V
POWER TRANSFORMER
240V
GRY
GRN
220V
RED
WHT
GRN
Fuse assembly, No.6
RED
Fuse assembly, No.5
BLU
BLK
BLU
RED
S006 POWER SW
AC220V 240V 50/60 Hz
AC INLET
Fuse assembly, No.8
RWG-084, No.13
Fuse assembly, No. 7
RWX-178, No.60
RWX-178, No.45
RWX-178, No.47
Fuse assembly, No.3
RWG-084, No.5
RWG-084, No.10
RWG-084, No.4
Fuse assembly, No.4
Fuse assembly, No.2
RWX-178, No.59
RWX-176, No.6
Foil side
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
C312 0.01
C305 0.01
D302 S3VC10
D301 S3VC10R
D306 SIB01-01 or W03B
D303 MI-151
R314 390
C311 220/25
C304 220/16
D307 1S2471
R306 3.9K
C310 47/50
C313 47/50
R307 10K
C307 47/50
C301 1500/35
24.1V
0V
Q304 2SC711
D304 1S2471
D305 SIB01-01 or W03B
R301 220
C302 100/35
R311 10K
24.3V
Q305 0V
2SA628
24.3V
R309 15K
R310 22K
R304 270 (1/2W)
C306 1000/50
C303 47/16
R302 470
ZD301 WZ-145
14.5V
R303 68
22.3V
Q301 2SC711
13.9V
R308 100
D308 1S2473
ZD302 BZ-240
R305 330 (1/2W)
C309 220/35
C308 100/50
C315 100/25
R312 47K
C314 22/25
R313 1K
D309 1S2473
33.7V
Q303 2SD234
24.9V
24.3V
22.4V
Q302 2SD526
13.9V
13.3V

Symbol	Part No.	Description		
R256	RD¼PS 153J	Carbon film	15k	
R257	RD¼PS 103J	Carbon film	10k	
R258	RD¼PS 472J	Carbon film	4.7k	
R259	RS1P 102J	Metal oxide	1k	1W
R260	RD¼PS 471J	Carbon film	470	
R261	RD¼PS 473J	Carbon film	47k	
R262	RD¼PS 153J	Carbon film	15k	
R263	RD¼PS 392J	Carbon film	3.9k	
R264	RD¼PS 392J	Carbon film	3.9k	
R265	RD¼PS 103J	Carbon film	10k	
R266	RD¼PS 272J	Carbon film	2.7k	
R267	RD¼PS 272J	Carbon film	2.7k	
R268	RD¼PS 393J	Carbon film	39k	
R269	RD¼PS 562J	Carbon film	5.6k	
R270	RD¼PS 562J	Carbon film	5.6k	
R271	RD¼PS 223J	Carbon film	22k	
R272	RD¼PS 183J	Carbon film	18k	
R273	RD¼PS 223J	Carbon film	22k	
R274	RD¼PS 103J	Carbon film	10k	
R275	RD¼PS 102J	Carbon film	1k	
R276	RD¼PS 563J	Carbon film	56k	
R277	RD¼PS 331J	Carbon film	330	
R278	RD¼PS 331J	Carbon film	330	
R279	RD¼PSF 101J	Carbon film	100	

OTHERS

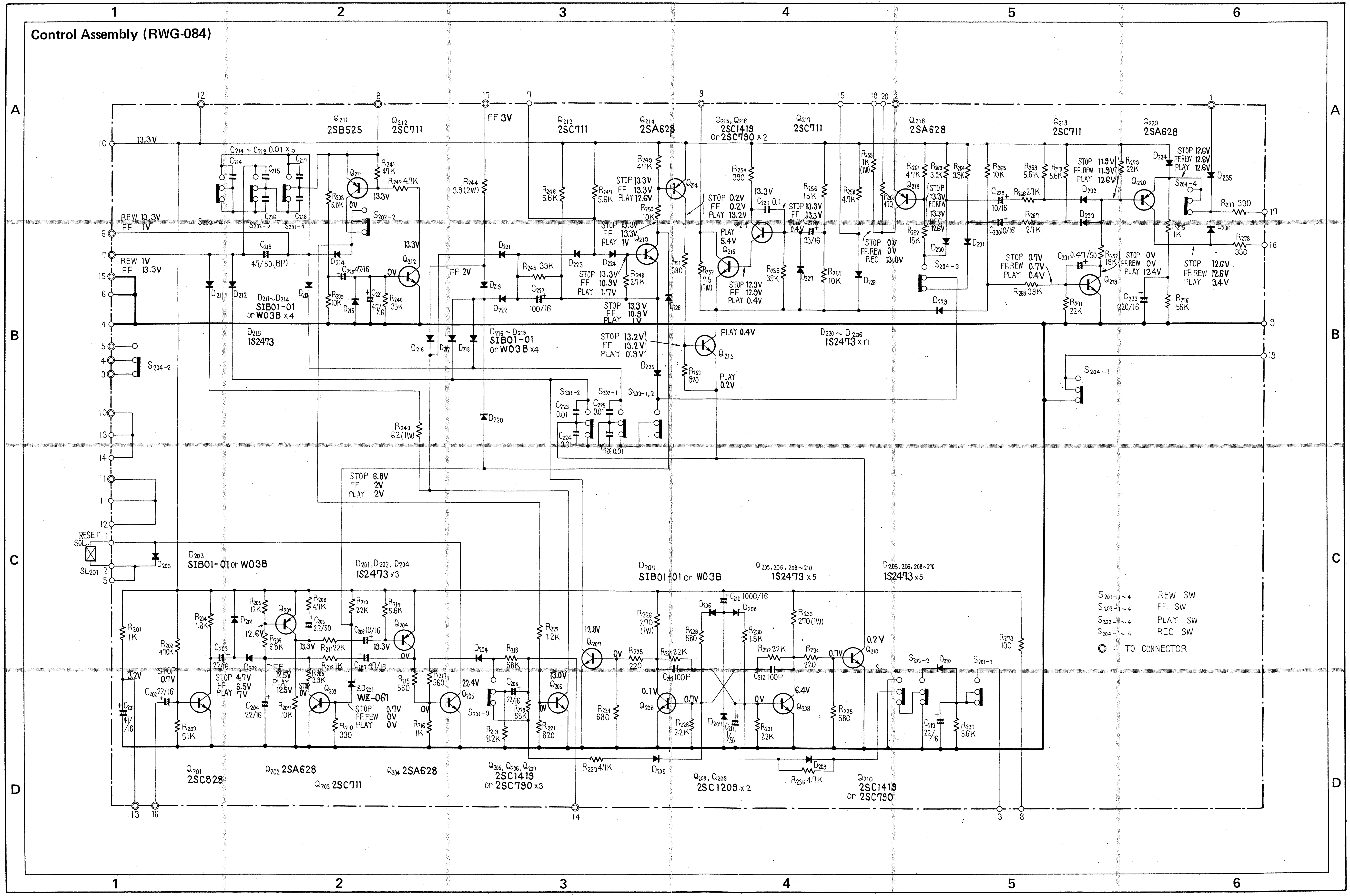
Symbol	Part No.	Description
SL201	RXP-044	Solenoid E
S201	RSG-056	Function switch
S202	RSG-056	Function switch
S203	RSG-056	Function switch
S204	RSG-056	Function switch
	RKP-033	Connector (17P)
	RNE-889	Release plate
	RBH-152	Release spring

SEMICONDUCTORS

Symbol	Part No.	Description
Q201	2SC828-S	Transistor
Q202	2SA628-E or F	Transistor
Q203	2SC711-E or F	Transistor
Q204	2SA628-E or F	Transistor
Q205	2SC1419-C or 2SC790-Y	Transistor
Q206	2SC1419-C or 2SC790-Y	Transistor
Q207	2SC1419-C or 2SC790-Y	Transistor
Q208	2SC1209-E	Transistor
Q209	2SC1209-E	Transistor
Q210	2SC1419-C or 2SC790-Y	Transistor
Q211	2SB525-D or E	Transistor
Q212	2SC711-E or F	Transistor
Q213	2SC711-E or F	Transistor
Q214	2SA628-E or F	Transistor
Q215	2SC1419-C or 2SC790-Y	Transistor
Q216	2SC1419-C or 2SC790-Y	Transistor
Q217	2SC711-E or F	Transistor
Q218	2SA628-E or F	Transistor
Q219	2SC711-E or F	Transistor
Q220	2SA628-E or F	Transistor
D201	1S2473	Diode
D202	1S2473	Diode
D203	SIB01-01 or W03B	Diode
D204	1S2473	Diode
D205	1S2473	Diode
D206	1S2473	Diode
D207	SIB01-01 or W03B	Diode
D208	1S2473	Diode
D209	1S2473	Diode
D210	1S2473	Diode
D211	SIB01-01 or W03B	Diode
D212	SIB01-01 or W03B	Diode
D213	SIB01-01 or W03B	Diode
D214	SIB01-01 or W03B	Diode
D215	1S2473	Diode
D216	SIB01-01 or W03B	Diode
D217	SIB01-01 or W03B	Diode
D218	SIB01-01 or W03B	Diode
D219	SIB01-01 or W03B	Diode
D220	1S2473	Diode
D221	1S2473	Diode
D222	1S2473	Diode
D223	1S2473	Diode
D224	1S2473	Diode
D225	1S2473	Diode
D226	1S2473	Diode
D227	1S2473	Diode
D228	1S2473	Diode
D229	1S2473	Diode
D230	1S2473	Diode
D231	1S2473	Diode
D232	1S2473	Diode
D233	1S2473	Diode
D234	1S2473	Diode
D235	1S2473	Diode
D236	1S2473	Diode
ZD201	WZ-061	Zener Diode

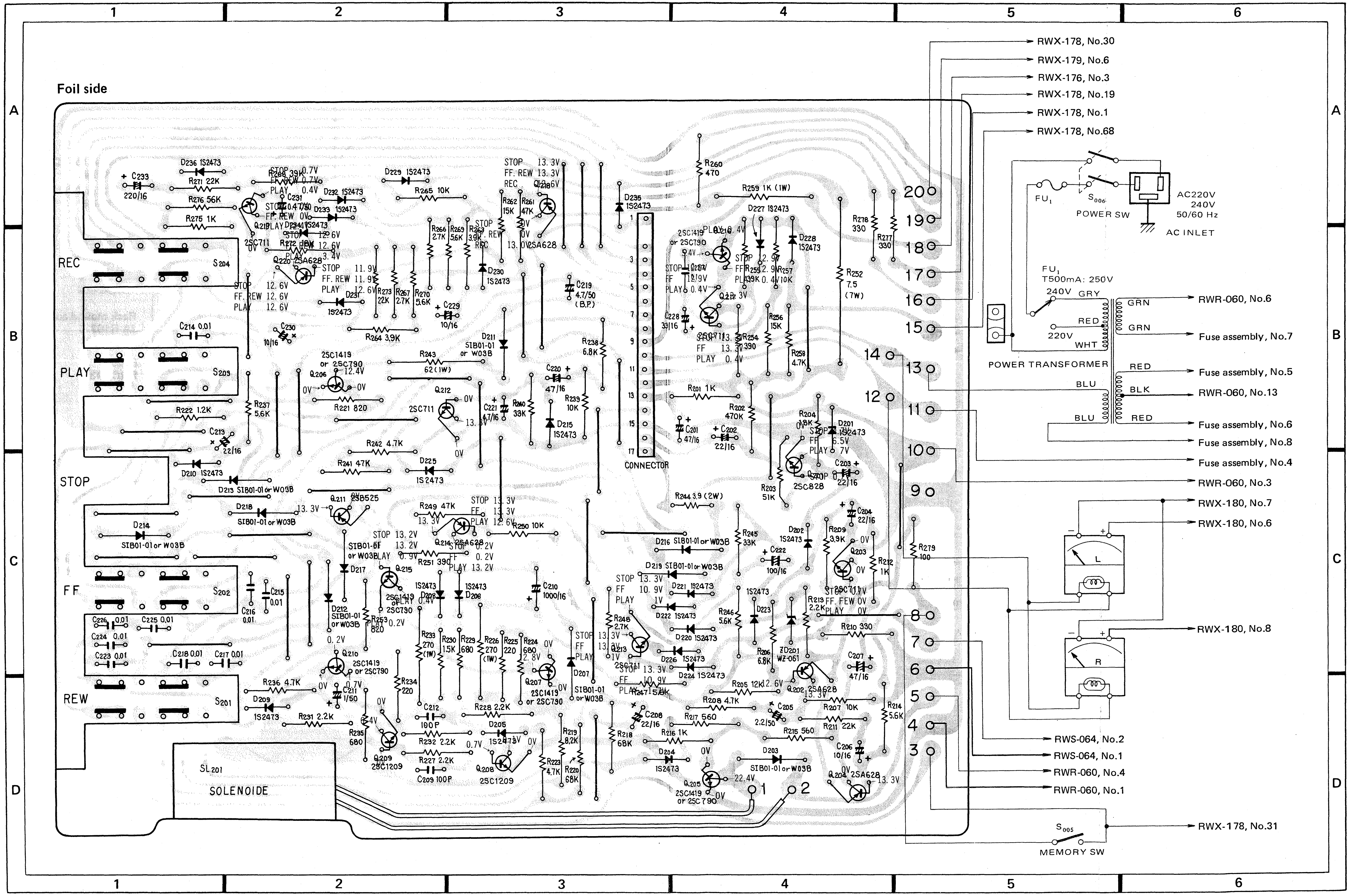
List of Changed Parts for Factory Modification

Symbol	Part No.	Description



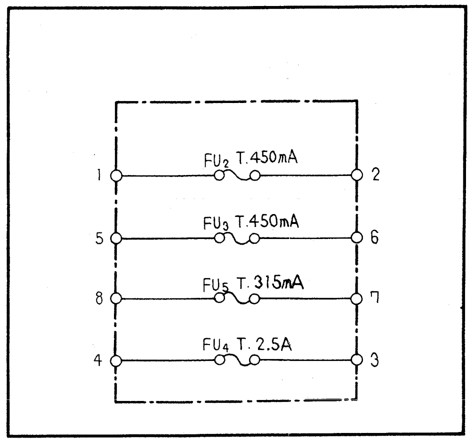
Control Assembly (RWG-084)

Q211 2SB525
Q212 2SC711
Q213 2SC711
Q214 2SA628
Q215, Q216 2SC1419 or 2SC790 x 2
Q217 2SC711
Q218 2SA628
Q219 2SC711
Q220 2SA628
C214 ~ C218 0.01 x 5
D211~D214 SIB01-01 or W03B x4
D215 1S2473
D216 ~ D219 SIB01-01 or W03B x4
D220 ~ D236 1S2473 x17
FF 3V
FF 2V
13.3V
REW 13.3V
FF 1V
REW 1V
FF 13.3V
STOP 13.3V
FF 13.3V
PLAY 12.6V
STOP 0.2V
FF 0.2V
PLAY 13.2V
PLAY 5.4V
STOP 12.9V
FF 12.9V
PLAY 0.4V
STOP 13.2V
FF 13.2V
PLAY 0.9V
PLAY 0.2V
STOP 12.6V
FF.REW 12.6V
PLAY 12.6V
STOP 11.9V
FF.REW 11.9V
PLAY 12.6V
STOP 0.7V
FF.REW 0.7V
PLAY 0.4V
STOP 0V
FF.REW 0V
PLAY 12.4V
STOP 12.6V
FF.REW 12.6V
PLAY 3.4V
STOP 0V
FF.REW 0V
REC 13.0V
STOP 6.8V
FF 2V
PLAY 2V
S201-2
S202-1
S203-1,2
S204-1
S204-2
S204-3
S204-4
RESET SOL
SL201
D203 SIB01-01 or W03B
D201, D202, D204 1S2473 x3
D207 SIB01-01 or W03B
Q205, 206, 208 ~ 210 1S2473 x5
D205, 206, 208~210 1S2473 x5
ZD201 WZ-061
STOP 4.7V
FF 6.5V
PLAY 7V
STOP 0.7V
FF.FEW 0V
PLAY 0V
Q201 2SC828
Q202 2SA628
Q203 2SC711
Q204 2SA628
Q205, Q206, Q207 2SC1419 or 2SC790 x3
Q208, Q209 2SC1209 x 2
Q210 2SC1419 or 2SC790
S201-1~4 REW SW
S202-1~4 FF SW
S203-1~4 PLAY SW
S204-1~4 REC SW
○ : TO CONNECTOR
1
2
3
4
5
6
A
B
C
D

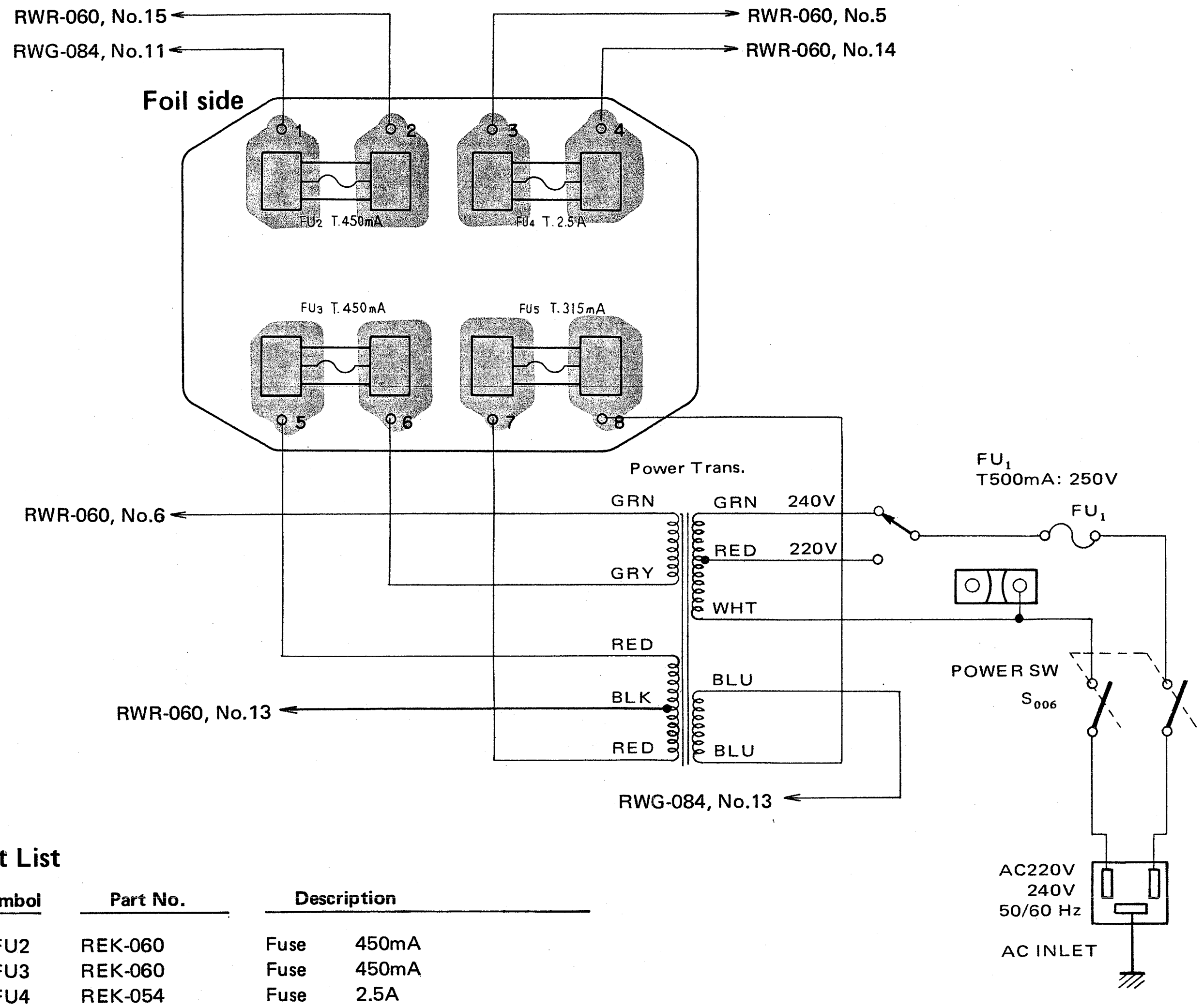

Foil side
1
2
3
4
5
6
A
B
C
D
REC
PLAY
STOP
FF
REW
S204
S203
S202
S201
SL201
SOLENOIDE
CONNECTOR
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
RWX-178, No.30
RWX-179, No.6
RWX-176, No.3
RWX-178, No.19
RWX-178, No.1
RWX-178, No.68
FU1
S006
POWER SW
AC220V
240V
50/60 Hz
AC INLET
FU1
T500mA: 250V
240V
GRY
GRN
RED
GRN
220V
WHT
POWER TRANSFORMER
RED
BLU
BLK
BLU
RED
RWR-060, No.6
Fuse assembly, No.7
Fuse assembly, No.5
RWR-060, No.13
Fuse assembly, No.6
Fuse assembly, No.8
Fuse assembly, No.4
RWR-060, No.3
RWX-180, No.7
RWX-180, No.6
L
RWX-180, No.8
R
RWS-064, No.2
RWS-064, No.1
RWR-060, No.4
RWR-060, No.1
RWX-178, No.31
S005
MEMORY SW
R260 470
D235 1S2473
R259 1K (1W)
D227 1S2473
D228 1S2473
R278 330
R277 330
R252 7.5 (7W)
R256 15K
R258 4.7K
R201 1K
R202 470K
C201 47/16
C202 22/16
R204 1.8K
D201 1S2473
C203 22/16
R203 51K
2SC828
R244 3.9 (2W)
R245 33K
D202 1S2473
C222 100/16
C204 22/16
R209 3.9K
Q203
R212 1K
R279 100
D216 S1B01-01 or W03B
D219 S1B01-01 or W03B
D221 1S2473
D222 1S2473
D220 1S2473
R246 5.6K
D223
R206 6.8K
ZD201 WZ-061
R213 2.2K
R210 330
C207 47/16
Q202 2SA628
R205 12K
R208 4.7K
C205 2.2/50
R207 10K
R211 22K
R214 5.6K
R217 560
R215 560
R216 1K
C206 10/16
D203 S1B01-01 or W03B
D204 1S2473
Q205 2SC1419 or 2SC790
Q204 2SA628
R218 68K
C208 22/16
R248 2.7K
Q213 2SC711
D226 1S2473
D224 1S2473
R247 5.6K
D236 1S2473
C233 220/16
R271 22K
R276 56K
R275 1K
Q219 2SC711
R268 39K
C231 0.47/50
D232 1S2473
D233 1S2473
D234 1S2473
R272 18K
Q220 2SA628
D229 1S2473
R265 10K
R266 2.7K
R269 5.6K
R263 3.9K
R262 15K
R261 47K
Q218 2SA628
D230 1S2473
D231 1S2473
R273 22K
R267 2.7K
R270 5.6K
C229 10/16
C219 4.7/50 (B.P.)
C214 0.01
C230 10/16
R264 3.9K
D211 S1B01-01 or W03B
R243 62 (1W)
Q206 2SC1419 or 2SC790
R221 820
Q212 2SC711
C221 4.7/16
R240 33K
C220 47/16
R239 10K
D215 1S2473
R238 6.8K
R222 1.2K
R237 5.6K
C213 22/16
R242 4.7K
R241 47K
D225 1S2473
D210 1S2473
D213 S1B01-01 or W03B
D218 S1B01-01 or W03B
Q211 2SB525
D214 S1B01-01 or W03B
R249 47K
Q214 2SA628
R250 10K
R251 390
D217 S1B01-01 or W03B
Q215 2SC1419 or 2SC790
D208 1S2473
D206 1S2473
C210 1000/16
C216 0.01
C215 0.01
D212 S1B01-01 or W03B
R253 820
C226 0.01
C225 0.01
C224 0.01
C223 0.01
C218 0.01
C217 0.01
Q210 2SC1419 or 2SC790
R233 270 (1W)
R230 1.5K
R229 680
R226 270 (1W)
R225 220
R224 680
Q207 2SC1419 or 2SC790
D207 S1B01-01 or W03B
R236 4.7K
C211 1/50
D209 1S2473
R231 2.2K
R234 220
R235 680
Q209 2SC1209
C212 100P
R232 2.2K
R227 2.2K
C209 100P
R228 2.2K
D205 1S2473
Q208 2SC1209
R219 8.2K
R223 4.7K
R220 68K
STOP 13.3V
FF.REW 13.3V
REC 13.0V
STOP 12.6V
FF.REW 12.6V
PLAY 12.6V
STOP 11.9V
FF.REW 11.9V
PLAY 12.6V
STOP 13.2V
FF 13.2V
PLAY 0.9V
STOP 13.3V
FF 10.9V
PLAY 0V
22.4V
13.3V
1
2

]

3.5 FUSE ASSEMBLY



FU2 T.450mA
FU3 T.450mA
FU5 T.315mA
FU4 T.2.5A
1
2
5
6
8
7
4
3



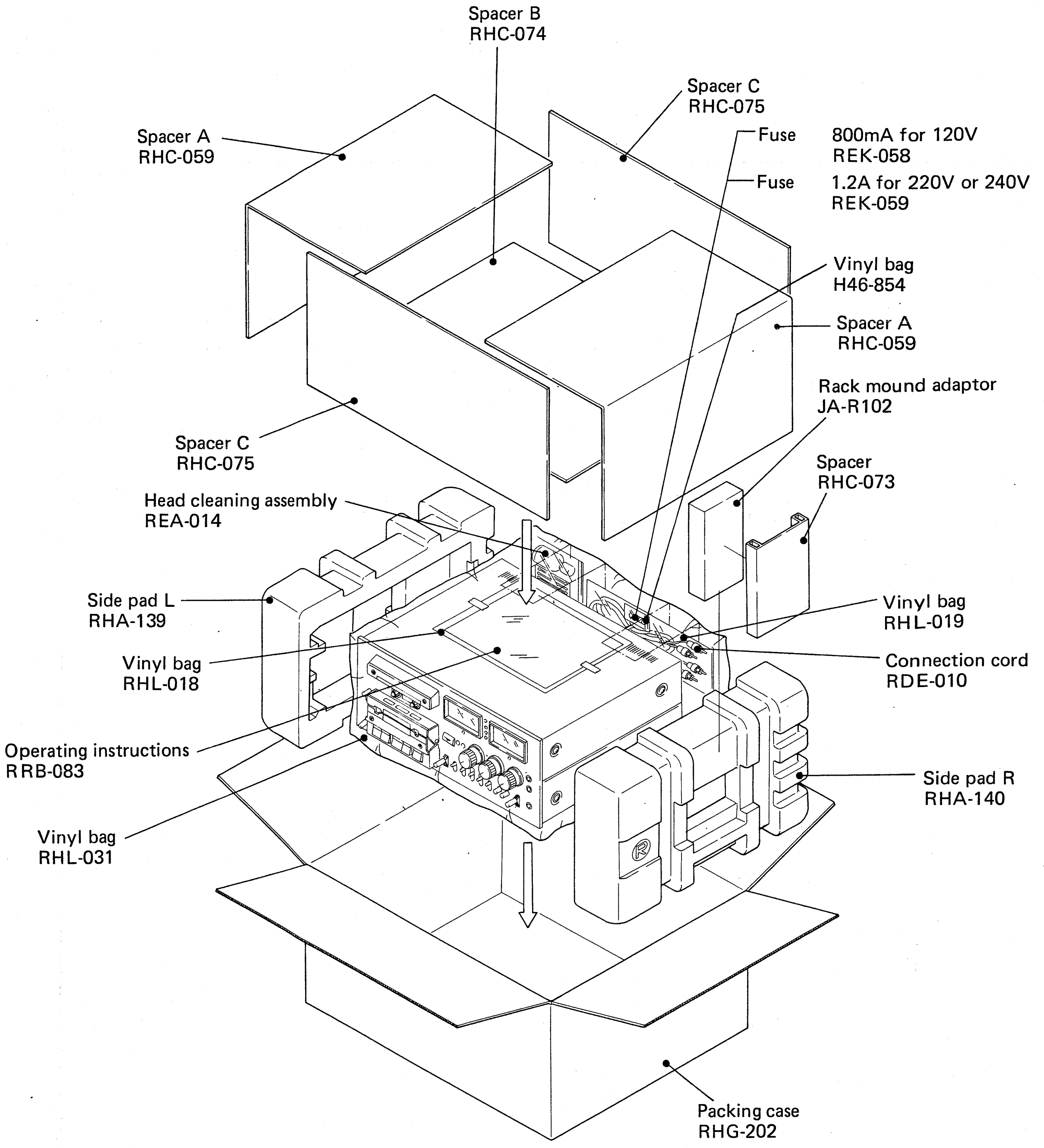
RWR-060, No.15
RWG-084, No.11
RWR-060, No.5
RWR-060, No.14
Foil side
1
2
3
4
FU2 T.450mA
FU4 T.2.5A
FU3 T.450mA
FU5 T.315mA
5
6
7
8
Power Trans.
GRN
GRN
240V
RED
220V
GRY
WHT
RED
BLU
BLK
RED
BLU
RWR-060, No.6
RWR-060, No.13
RWG-084, No.13
FU1
T500mA: 250V
FU1
POWER SW
S006
AC220V
240V
50/60 Hz
AC INLET

Part List

Symbol	Part No.	Description	
FU2	REK-060	Fuse	450mA
FU3	REK-060	Fuse	450mA
FU4	REK-054	Fuse	2.5A
FU5	REK-052	Fuse	315mA
	RKR-013	Fuse holder B	

4. PACKING

4.1 PACKING FOR CT-F1000/D, D/G



Spacer B
RHC-074
Spacer C
RHC-075
Spacer A
RHC-059
Fuse
800mA for 120V
REK-058
Fuse
1.2A for 220V or 240V
REK-059
Vinyl bag
H46-854
Spacer A
RHC-059
Rack mound adaptor
JA-R102
Spacer C
RHC-075
Spacer
RHC-073
Head cleaning assembly
REA-014
Side pad L
RHA-139
Vinyl bag
RHL-019
Vinyl bag
RHL-018
Connection cord
RDE-010
Operating instructions
RRB-083
Side pad R
RHA-140
Vinyl bag
RHL-031
Packing case
RHG-202

3-HEAD CASSETTE TAPE DECK

CT-F1000

D, D/G, HG

Additional

Service Manual

- This additional service manual provides the description of the parts applied only D, D/G and HG model.
- For detailed instructions on adjustments, circuit descriptions, exploded views, etc., please refer to the Service Manual of CT-F1000/KCU (page 3 ~ page 82).

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4. PACKING

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Parts List

CAPACITORS

Symbol	Part No.	Description		
C301	CEA 152P 35	Electrolytic	1500	35V
C302	CEA 101P 35	Electrolytic	100	35V
C303	CEA 470P 16	Electrolytic	47	16V
C304	CEA 221P 16	Electrolytic	220	16V
C305	CKDYF 103Z 50	Ceramic	0.01	50V
C306	CEA 102P 50	Electrolytic	1000	50V
C307	CEA 470P 50	Electrolytic	47	50V
C308	CEA 101P 50	Electrolytic	100	50V
C309	CEA 221P 35	Electrolytic	220	35V
C310	CEA 470P 50	Electrolytic	47	50V
C311	CEA 221P 25	Electrolytic	220	25V
C312	CKDYF 103Z 50	Ceramic	0.01	50V
C313	CEA 4R7P 50	Electrolytic	4.7	50V
C314	CEA 220P 25	Electrolytic	22	25V
C315	CEA 101P 25	Electrolytic	100	25V

RESISTORS

Symbol	Part No.	Description		
R301	RD¼PSF 221J	Carbon film	220	
R302	RD¼PSF 471J	Carbon film	470	
R303	RD¼PSF 680J	Carbon film	68	
R304	RS½PSF 271J	Carbon film	270	½W
R305	RS½PSF 331J	Carbon film	330	½W
R306	RD¼PS 392J	Carbon film	3.9k	
R307	RD¼PS 103J	Carbon film	10k	
R308	RD¼PS 101J	Carbon film	100	
R309	RD¼PS 153J	Carbon film	15k	
R310	RD¼PS 223J	Carbon film	22k	
R311	RD¼PS 103J	Carbon film	10k	
R312	RD¼PS 473J	Carbon film	47k	
R313	RD¼PSF 101J	Carbon film	100	
R314	RD¼PS 391J	Carbon film	390	

OTHERS

Symbol	Part No.	Description
	RKH-004	Insulator
	REE-051	Insulator

SEMICONDUCTORS

Symbol	Part No.	Description
Q301	2SC711-E or F	Transistor
Q302	2SD526-O or Y	Transistor
Q303	2SD234-O or Y	Transistor
Q304	2SC711-E or F	Transistor
Q305	2SA628-E or F	Transistor
D301	S3VC10R	Diode
D302	S3VC10	Diode
D303	MI-151	Diode
D304	1S2471	Diode
D305	SIB01-01 or W03B	Diode
D306	SIB01-01 or W03B	Diode
D307	1S2471	Diode
D308	1S2473	Diode
D309	1S2473	Diode
ZD301	WZ-145	Zener Diode
ZD302	BZ-240	Zener Diode

List of Changed Parts for Factory Modification

Symbol	Part No.	Description

2.4 CONTROL ASSEMBLY (RWG-083)

Parts List

CAPACITORS

Symbol	Part No.	Description		
C201	CEA 470P 16	Electrolytic	47	16V
C202	CEA 220P 16	Electrolytic	22	16V
C203	CEA 220P 16	Electrolytic	22	16V
C204	CEA 220P 16	Electrolytic	22	16V
C205	CEA 2R2P 50	Electrolytic	2.2	50V
C206	CEA 100P 16	Electrolytic	10	16V
C207	CEA 470P 16	Electrolytic	47	16V
C208	CEA 220P 16	Electrolytic	22	16V
C209	CCDSL 101K 50	Ceramic	100p	50V
C210	CEA 102P 16	Electrolytic	1000	16V
C211	CEA 010P 50	Electrolytic	0.1	50V
C212	CCDSL 101K 50	Ceramic	100p	50V
C213	CEA 220P 16	Electrolytic	22	16V
C214	CKDYF 103Z 50	Ceramic	0.01	50V
C215	CKDYF 103Z 50	Ceramic	0.01	50V
C216	CKDYF 103Z 50	Ceramic	0.01	50V
C217	CKDYF 103Z 50	Ceramic	0.01	50V
C218	CKDYF 103Z 50	Ceramic	0.01	50V
C219	RCH-026	Electrolytic	4.7	50V
C220	CEA 470P 16	Electrolytic	47	16V
C221	CEA 4R7P 35	Electrolytic	4.7	35V
C222	CEA 101P 16	Electrolytic	100	16V
C223	CKDYF 103Z 50	Ceramic	0.01	50V
C224	CKDYF 103Z 50	Ceramic	0.01	50V
C225	CKDYF 103Z 50	Ceramic	0.01	50V
C226	CKDYF 103Z 50	Ceramic	0.01	50V
C227	CQMA 104K 50	Mylar	0.1	50V
C228	CEA 330P 16	Electrolytic	33	16V
C229	CEA 100P 16	Electrolytic	10	16V
C230	CEA 100P 16	Electrolytic	10	16V
C231	CEA R47P 50	Electrolytic	0.47	50V
C233	CEA 221P 16	Electrolytic	220	16V

RESISTORS

Symbol	Part No.	Description		
R201	RD¼PS 102J	Carbon film	1k	
R202	RD¼PS 474J	Carbon film	470k	
R203	RD¼PS 513J	Carbon film	51k	
R204	RD¼PS 182J	Carbon film	1.8k	
R205	RD¼PS 123J	Carbon film	12k	
R206	RD¼PS 682J	Carbon film	6.8k	
R207	RD¼PS 103J	Carbon film	10k	
R208	RD¼PS 472J	Carbon film	4.7k	
R209	RD¼PS 392J	Carbon film	3.9k	
R210	RD¼PS 331J	Carbon film	330	
R211	RD¼PS 223J	Carbon film	22k	
R212	RD¼PS 102J	Carbon film	1k	
R213	RD¼PS 222J	Carbon film	2.2k	
R214	RD¼PS 562J	Carbon film	5.6k	
R215	RD¼PS 561J	Carbon film	560	
R216	RD¼PS 102J	Carbon film	1k	
R217	RD¼PS 561J	Carbon film	560	
R218	RD¼PS 683J	Carbon film	68k	
R219	RD¼PS 822J	Carbon film	8.2k	
R220	RD¼PS 683J	Carbon film	68k	
R221	RD¼PS 821J	Carbon film	820	
R222	RD¼PS 122J	Carbon film	1.2k	
R223	RD¼PS 472J	Carbon film	4.7k	
R224	RD¼PS 681J	Carbon film	680	
R225	RD¼PS 221J	Carbon film	220	
R226	RS1P 271J	Metal oxide	270	1W
R227	RD¼PS 222J	Carbon film	2.2k	
R228	RD¼PS 222J	Carbon film	2.2k	
R229	RD¼PS 681J	Carbon film	680	
R230	RD¼PS 152J	Carbon film	1.5k	
R231	RD¼PS 222J	Carbon film	2.2k	
R232	RD¼PS 222J	Carbon film	2.2k	
R233	RS1P 271J	Metal oxide	270	1W
R234	RD¼PS 221J	Carbon film	220	
R235	RD¼PS 681J	Carbon film	680	
R236	RD¼PS 472J	Carbon film	4.7k	
R237	RD¼PS 562J	Carbon film	5.6k	
R238	RD¼PS 682J	Carbon film	6.8k	
R239	RD¼PS 103J	Carbon film	10k	
R240	RD¼PS 333J	Carbon film	33k	
R241	RD¼PS 473J	Carbon film	47k	
R242	RD¼PS 472J	Carbon film	4.7k	
R243	RS1PSF 620J	Metal oxide	62	1W
R244	RCN-031	Wire wound resistor	3.9	2W
R245	RD¼PS 333J	Carbon film	33k	
R246	RD¼PS 562J	Carbon film	5.6k	
R247	RD¼PS 562J	Carbon film	5.6k	
R248	RD¼PS 272J	Carbon film	2.7k	
R249	RD¼PS 473J	Carbon film	47k	
R250	RD¼PS 103J	Carbon film	10k	
R251	RD¼PS 391J	Carbon film	390	
R252	RCN-032	Wire wound resistor	7.5	7W
R253	RD¼PS 821J	Carbon film	820	
R254	RD¼PS 391J	Carbon film	390	
R255	RD¼PS 393J	Carbon film	39k	

Parts List

CAPACITORS

Symbol	Part No.	Description		
C301	CEA 152P 35	Electrolytic	1500	35V
C302	CEA 101P 35	Electrolytic	100	35V
C303	CEA 470P 16	Electrolytic	47	16V
C304	CEA 221P 16	Electrolytic	220	16V
C305	CKDYF 103Z 50	Ceramic	0.01	50V
C306	CEA 102P 50	Electrolytic	1000	50V
C307	CEA 470P 50	Electrolytic	47	50V
C308	CEA 101P 50	Electrolytic	100	50V
C309	CEA 221P 35	Electrolytic	220	35V
C310	CEA 470P 50	Electrolytic	47	50V
C311	CEA 221P 25	Electrolytic	220	25V
C312	CKDYF 103Z 50	Ceramic	0.01	50V
C313	CEA 4R7P 50	Electrolytic	4.7	50V
C314	CEA 220P 25	Electrolytic	22	25V
C315	CEA 101P 25	Electrolytic	100	25V

RESISTORS

Symbol	Part No.	Description		
R301	RD¼PSF 221J	Carbon film	220	
R302	RD¼PSF 471J	Carbon film	470	
R303	RD¼PSF 680J	Carbon film	68	
R304	RS½PSF 271J	Carbon film	270	½W
R305	RS½PSF 331J	Carbon film	330	½W
R306	RD¼PS 392J	Carbon film	3.9k	
R307	RD¼PS 103J	Carbon film	10k	
R308	RD¼PS 101J	Carbon film	100	
R309	RD¼PS 153J	Carbon film	15k	
R310	RD¼PS 223J	Carbon film	22k	
R311	RD¼PS 103J	Carbon film	10k	
R312	RD¼PS 473J	Carbon film	47k	
R313	RD¼PSF 102J	Carbon film	1k	
R314	RD¼PS 391J	Carbon film	390	

OTHERS

Symbol	Part No.	Description
	RKH-004	Insulator
	REE-051	Insulator

SEMICONDUCTORS

Symbol	Part No.	Description
Q301	2SC711-E or F	Transistor
Q302	2SD526-O or Y	Transistor
Q303	2SD234-O or Y	Transistor
Q304	2SC711-E or F	Transistor
Q305	2SA628-E or F	Transistor
D301	S3VC10R	Diode
D302	S3VC10	Diode
D303	MI-151	Diode
D304	1S2471	Diode
D305	SIB01-01 or W03B	Diode
D306	SIB01-01 or W03B	Diode
D307	1S2471	Diode
D308	1S2473	Diode
D309	1S2473	Diode
ZD301	WZ-145	Zener Diode
ZD302	BZ-240	Zener Diode

List of Changed Parts for Factory Modification

Symbol	Part No.	Description

3.4 CONTROL ASSEMBLY (RWG-084)

Parts List

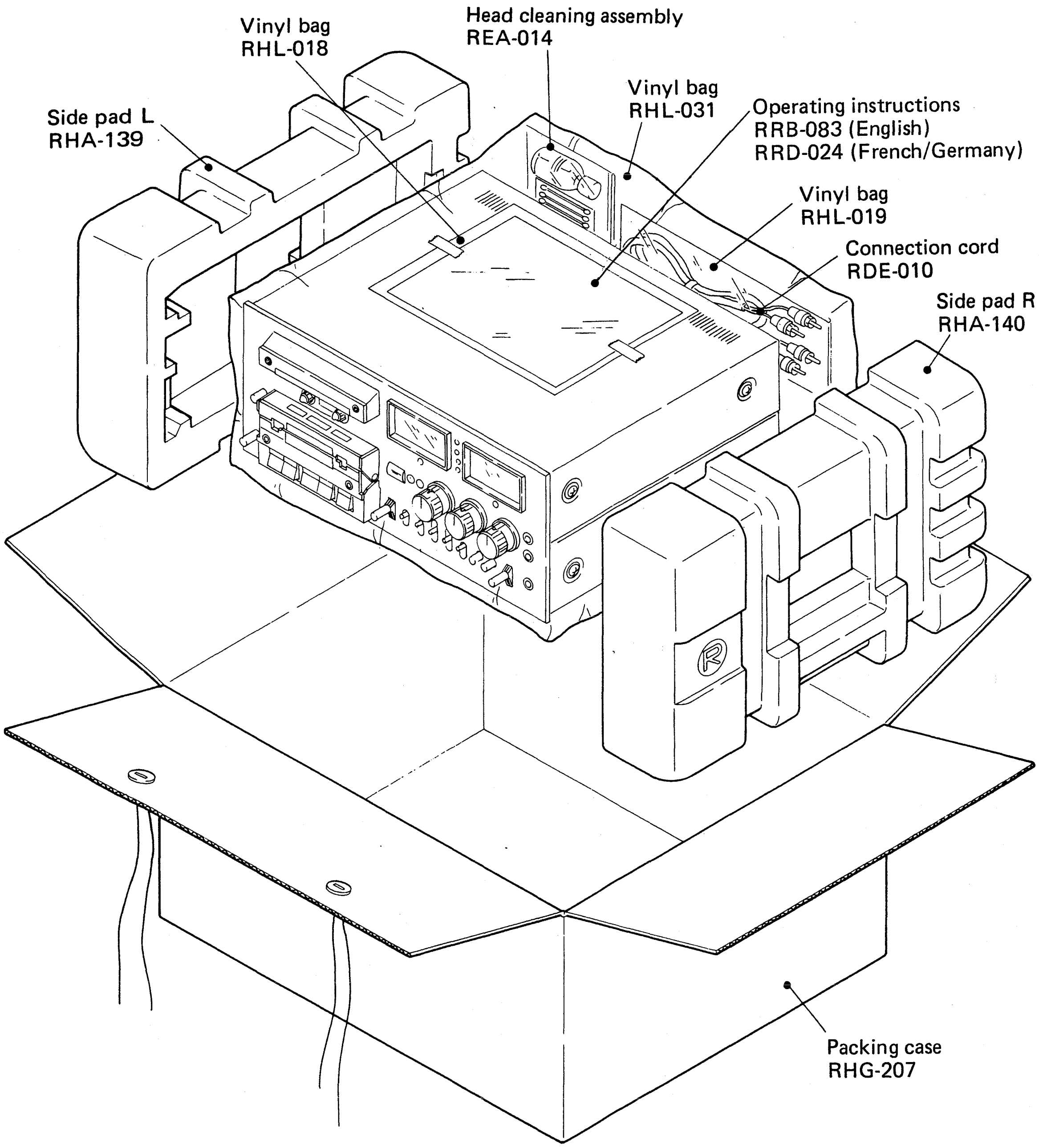
CAPACITORS

Symbol	Part No.	Description		
C201	CEA 470P 16	Electrolytic	47	16V
C202	CEA 220P 16	Electrolytic	22	16V
C203	CEA 220P 16	Electrolytic	22	16V
C204	CEA 220P 16	Electrolytic	22	16V
C205	CEA 2R2P 50	Electrolytic	2.2	50V
C206	CEA 100P 16	Electrolytic	10	16V
C207	CEA 470P 16	Electrolytic	47	16V
C208	CEA 220P 16	Electrolytic	22	16V
C209	CCDSL 101K 50	Ceramic	100p	50V
C210	CEA 102P 16	Electrolytic	1000	16V
C211	CEA 010P 50	Electrolytic	1	50V
C212	CCDSL 101K 50	Ceramic	100p	50V
C213	CEA 220P 16	Electrolytic	22	16V
C214	CKDYF 103Z 50	Ceramic	0.01	50V
C215	CKDYF 103Z 50	Ceramic	0.01	50V
C216	CKDYF 103Z 50	Ceramic	0.01	50V
C217	CKDYF 103Z 50	Ceramic	0.01	50V
C218	CKDYF 103Z 50	Ceramic	0.01	50V
C219	RCH-026	Electrolytic	4.7	50V
C220	CEA 470P 16	Electrolytic	47	16V
C221	CEA 4R7P 35	Electrolytic	4.7	35V
C222	CEA 101P 16	Electrolytic	100	16V
C223	CKDYF 103Z 50	Ceramic	0.01	50V
C224	CKDYF 103Z 50	Ceramic	0.01	50V
C225	CKDYF 103Z 50	Ceramic	0.01	50V
C226	CKDYF 103Z 50	Ceramic	0.01	50V
C227	CQMA 104K 50	Mylar	0.1	50V
C228	CEA 330P 16	Electrolytic	33	16V
C229	CEA 100P 16	Electrolytic	10	16V
C230	CEA 100P 16	Electrolytic	10	16V
C231	CEA R47P 50	Electrolytic	0.47	50V
C233	CEA 221P 16	Electrolytic	220	16V

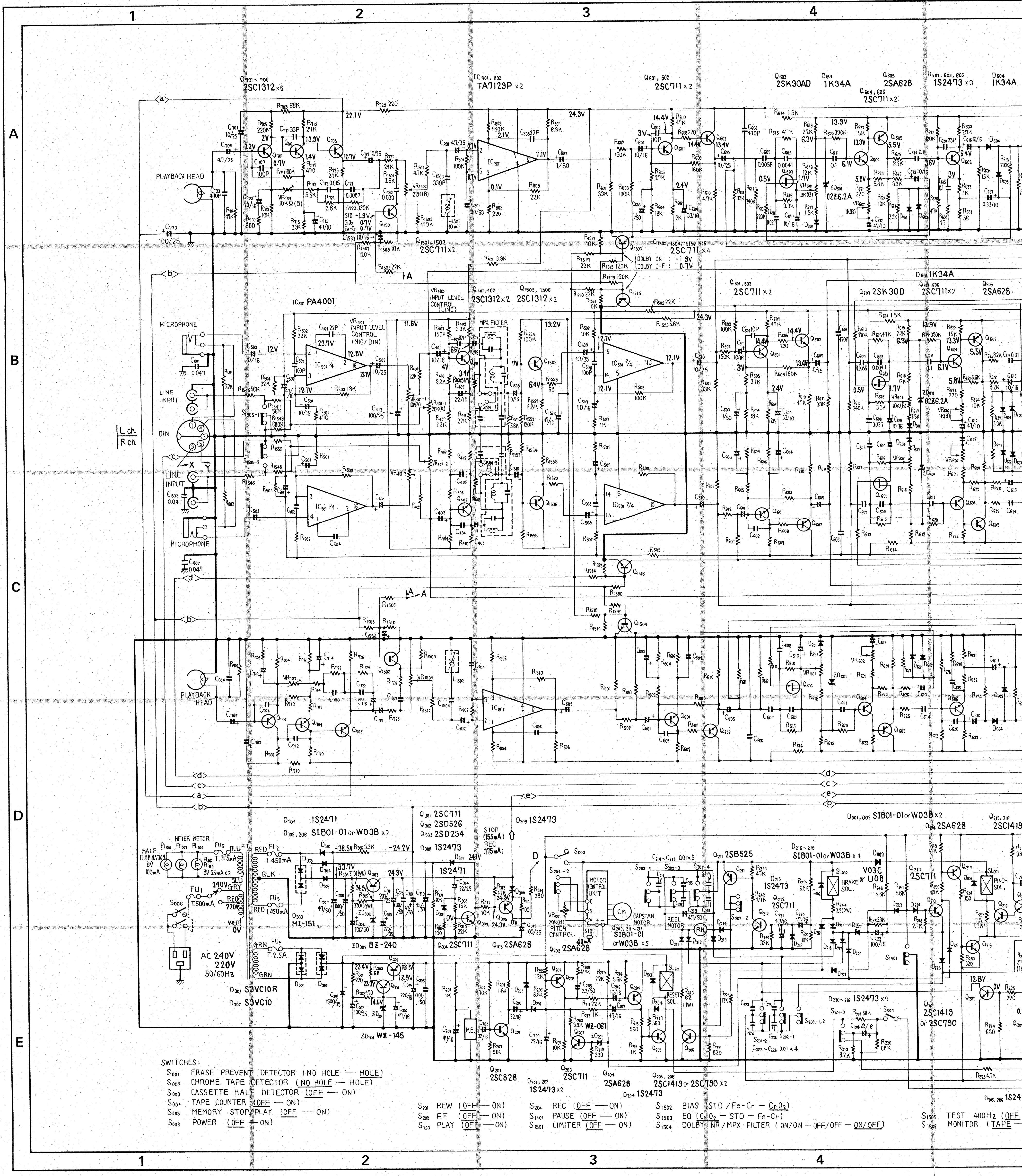
RESISTORS

Symbol	Part No.	Description		
R201	RD¼PS 102J	Carbon film	1k	
R202	RD¼PS 474J	Carbon film	470k	
R203	RD¼PS 513J	Carbon film	51k	
R204	RD¼PS 182J	Carbon film	1.8k	
R205	RD¼PS 123J	Carbon film	12k	
R206	RD¼PS 682J	Carbon film	6.8k	
R207	RD¼PS 103J	Carbon film	10k	
R208	RD¼PS 472J	Carbon film	4.7k	
R209	RD¼PS 392J	Carbon film	3.9k	
R210	RD¼PS 331J	Carbon film	330	
R211	RD¼PS 223J	Carbon film	22k	
R212	RD¼PS 102J	Carbon film	1k	
R213	RD¼PS 222J	Carbon film	2.2k	
R214	RD¼PS 562J	Carbon film	5.6k	
R215	RD¼PS 561J	Carbon film	560	
R216	RD¼PS 102J	Carbon film	1k	
R217	RD¼PS 561J	Carbon film	560	
R218	RD¼PS 683J	Carbon film	68k	
R219	RD¼PS 822J	Carbon film	8.2k	
R220	RD¼PS 683J	Carbon film	68k	
R221	RD¼PS 821J	Carbon film	820	
R222	RD¼PSF 122J	Carbon film	1.2k	
R223	RD¼PS 472J	Carbon film	4.7k	
R224	RD¼PS 681J	Carbon film	680	
R225	RD¼PS 221J	Carbon film	220	
R226	RS1P 271J	Metal oxide	270	1W
R227	RD¼PS 222J	Carbon film	2.2k	
R228	RD¼PS 222J	Carbon film	2.2k	
R229	RD¼PS 681J	Carbon film	680	
R230	RD¼PS 152J	Carbon film	1.5k	
R231	RD¼PS 222J	Carbon film	2.2k	
R232	RD¼PS 222J	Carbon film	2.2k	
R233	RS1P 271J	Metal oxide	270	1W
R234	RD¼PS 221J	Carbon film	220	
R235	RD¼PS 681J	Carbon film	680	
R236	RD¼PS 472J	Carbon film	4.7k	
R237	RD¼PS 562J	Carbon film	5.6k	
R238	RD¼PS 682J	Carbon film	6.8k	
R239	RD¼PS 103J	Carbon film	10k	
R240	RD¼PS 333J	Carbon film	33k	
R241	RD¼PS 473J	Carbon film	47k	
R242	RD¼PS 472J	Carbon film	4.7k	
R243	RS1PSF 620	Metal oxide	62	1W
R244	RCN-031	Wire wound resistor	3.9	2W
R245	RD¼PS 333J	Carbon film	33k	
R246	RD¼PS 562J	Carbon film	5.6k	
R247	RD¼PS 562J	Carbon film	5.6k	
R248	RD¼PS 272J	Carbon film	2.7k	
R249	RD¼PS 473J	Carbon film	47k	
R250	RD¼PS 103J	Carbon film	10k	
R251	RD¼PS 391J	Carbon film	390	
R252	RCN-032	Wire wound resistor	7.5	7W
R253	RD¼PS 821J	Carbon film	820	
R254	RD¼PS 391J	Carbon film	390	
R255	RD¼PS 393J	Carbon film	39k	

4.2 PACKING FOR CT-F1000/HG


Vinyl bag
RHL-018
Head cleaning assembly
REA-014
Vinyl bag
RHL-031
Operating instructions
RRB-083 (English)
RRD-024 (French/Germany)
Side pad L
RHA-139
Vinyl bag
RHL-019
Connection cord
RDE-010
Side pad R
RHA-140
Packing case
RHG-207

3-HEAD
CASSETTE TAPE DECK
CT-F1000
HG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A
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E
Q701 ~ 706 2SC1312×6
IC801, 802 TA7129P ×2
Q601, 602 2SC711×2
Q603 2SK30AD
D601 1K34A
Q605 2SA628
Q604, 606 2SC711×2
D602, 603, 605 1S2473×3
D604 1K34A
PLAYBACK HEAD
Q1501, 1502 2SC711×2
Q1503, 1504, 1515, 1516 2SC711×4
DOLBY ON : -1.9V
DOLBY OFF : 0.7V
IC501 PA4001
VR402 INPUT LEVEL CONTROL (LINE)
Q401, 402 2SC1312×2
Q1505, 1506 2SC1312×2
VR401 INPUT LEVEL CONTROL (MIC/DIN)
MPX FILTER
MICROPHONE
LINE INPUT
DIN
Lch
Rch
IC501 1/4
IC501 2/4
IC801
IC802
Q601, 602 2SC711×2
Q603 2SK30D
Q604, 606 2SC711×2
Q605 2SA628
D601 1K34A
D304 1S2471
D305, 306 S1B01-01 or W03B ×2
Q301 2SC711
Q302 2SD526
Q303 2SD234
D308 1S2473
D309 1S2473
STOP (155mA)
REC (175mA)
HALF ILLUMINATION 8V 100mA
METER
PL001
PL002
PL003
FU5 T.315mA
FU2 T.450mA
FU1 T.500mA
FU3 T.450mA
FU4 T.2.5A
AC 240V 220V 50/60Hz
D301 S3VC10R
D302 S3VC10
ZD301 WZ-145
ZD302 BZ-240
D303 MI-151
Q304 2SC711
Q305 2SA628
Q211 2SB525
D216 ~ 219 S1B01-01 or W03B ×4
BRAKE SOL.
D001, 002 S1B01-01 or W03B ×2
Q214 2SA628
Q215, 216 2SC1419
Q212 2SC711
Q213 2SC711
MOTOR CONTROL UNIT
CAPSTAN MOTOR
REEL MOTOR
VR001 20K(B) PITCH CONTROL
D203, 211 ~ 214 S1B01-01 or W03B ×5
Q202 2SA628
D215 1S2473
D220 ~ 226 1S2473 ×7
RESET SOL.
H.E.
WZ-061
Q201 2SC828
Q203 2SC711
Q204 2SA628
Q205, 206 2SC1419 or 2SC790 ×2
D201, 202 1S2473 ×2
D204 1S2473
D205, 206 1S24
PINCH SOL.
Q217 2SC1419 or 2SC790
V03C or U05B
12.8V

SWITCHES:

- S001 ERASE PREVENT DETECTOR (NO HOLE — HOLE)
- S002 CHROME TAPE DETECTOR (NO HOLE — HOLE)
- S003 CASSETTE HALF DETECTOR (OFF — ON)
- S004 TAPE COUNTER (OFF — ON)
- S005 MEMORY STOP/PLAY (OFF — ON)
- S006 POWER (OFF — ON)

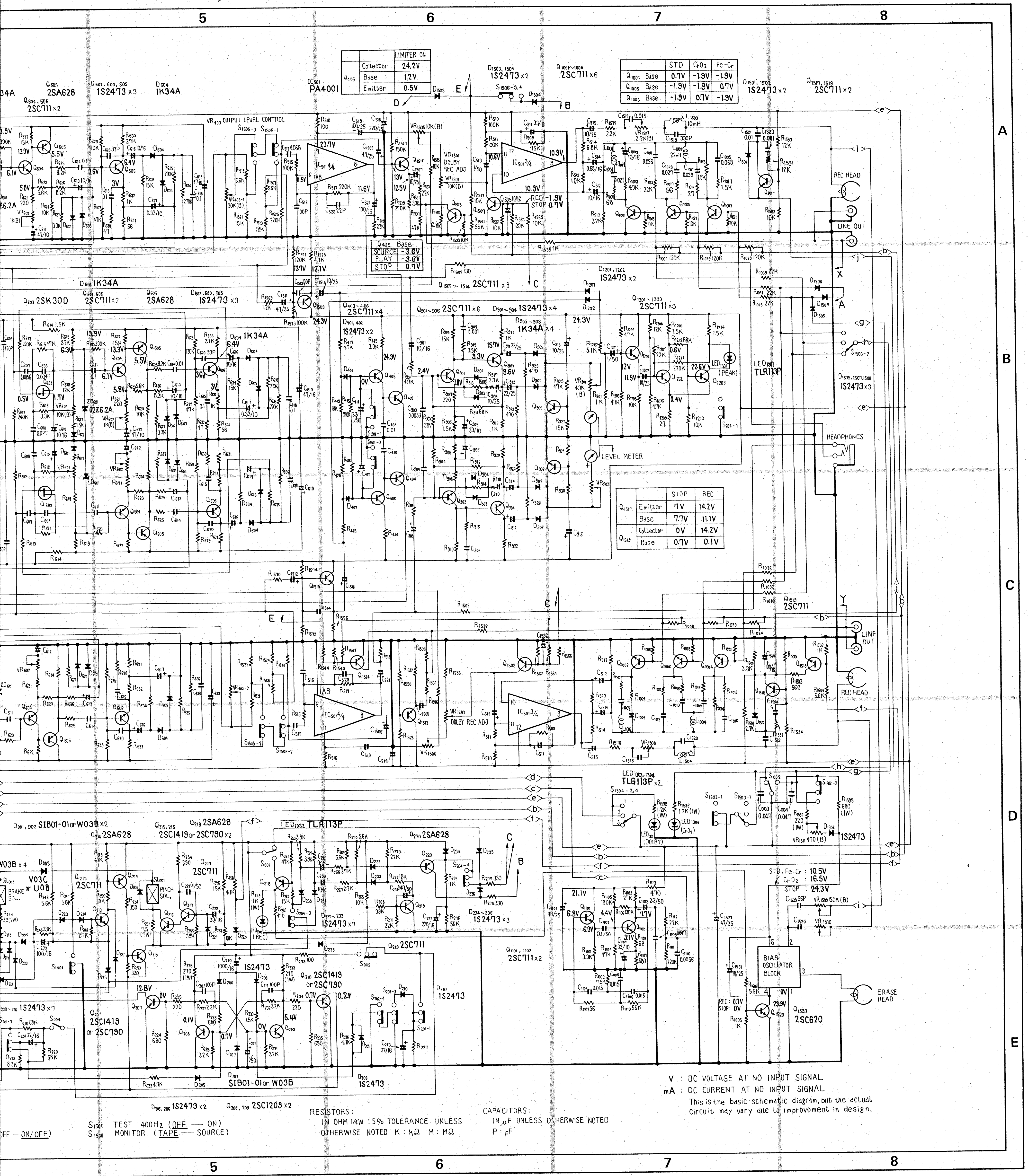
- S201 REW (OFF — ON)
- S202 F.F (OFF — ON)
- S203 PLAY (OFF — ON)

- S204 REC (OFF — ON)
- S1401 PAUSE (OFF — ON)
- S1501 LIMITER (OFF — ON)

- S1502 BIAS (STD / Fe-Cr — Cr O2)
- S1503 EQ (Cr O2 — STD — Fe-Cr)
- S1504 DOLBY NR / MPX FILTER (ON/ON — OFF/OFF — ON/OFF)

- S1505 TEST 400Hz (OFF
- S1506 MONITOR (TAPE —

PIONEER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IC501 PA4001
VR403 OUTPUT LEVEL CONTROL
VR1501 DOLBY REC ADJ
VR1502 DOLBY REC ADJ
D1503, 1504 1S2473 x2
Q1001~1006 2SC711 x6
D1501, 1502 1S2473 x2
Q1517, 1518 2SC711 x2
Q605 2SA628
D602, 603, 605 1S2473 x3
D604 1K34A
Q604, 606 2SC711 x2
D601 1K34A
Q603 2SK30D
Q1201~1203 2SC711 x3
D1201, 1202 1S2473 x2
Q1507~1514 2SC711 x8
Q401~406 2SC711 x4
D401, 402 1S2473 x2
Q301~306 2SC711 x6
D301~304 1S2473 x4
D305~308 1K34A x4
LED1301 TLR113P
D1505, 1507, 1508 1S2473 x3
REC HEAD
LINE OUT
HEADPHONES
LEVEL METER
Q1519 2SC711
LED1303, 1304 TLG113P x2
LED1301 (DOLBY)
D001, 002 SIB01-01 or W03B x2
Q215, 216 2SC1419 or 2SC790 x2
Q218 2SA628
Q214 2SA628
LED1032 TLR113P
Q220 2SA628
Q213 2SC711
Q217 2SC711
BRAKE SOL.
PINCH SOL.
Q219 2SC711
Q210 2SC1419 or 2SC790
D210 1S2473
Q101, 102 2SC711 x2
D227~233 1S2473 x7
D234~236 1S2473 x3
Q207 2SC1419 or 2SC790
D207 SIB01-01 or W03B
D209 1S2473
D205, 206 1S2473 x2
Q208, 209 2SC1209 x2
STD, Fe-Cr : 10.5V
CrO2 : 16.5V
STOP : 24.3V
BIAS OSCILLATOR BLOCK
ERASE HEAD
REC: 0.7V
STOP: 0V
Q1520 2SC620

		LIMITER ON
Q405	Collector	24.2V
	Base	1.2V
	Emitter	0.5V

	STD	CrO2	Fe-Cr
Q1001 Base	0.7V	-1.9V	-1.9V
Q1005 Base	-1.9V	-1.9V	0.7V
Q1003 Base	-1.9V	0.7V	-1.9V

Q405	Base
SOURCE	-3.6V
PLAY	-3.6V
STOP	0.7V

		STOP	REC
Q1517	Emitter	7V	14.2V
	Base	7.7V	11.1V
Q1519	Collector	0V	14.2V
	Base	0.7V	0.1V

V : DC VOLTAGE AT NO INPUT SIGNAL
mA : DC CURRENT AT NO INPUT SIGNAL
This is the basic schematic diagram, but the actual circuit may vary due to improvoment in design.

OFF — ON/OFF)

S1505 TEST 400Hz (OFF — ON)
S1506 MONITOR (TAPE — SOURCE)

RESISTORS:
IN OHM 1/4W ±5% TOLERANCE UNLESS OTHERWISE NOTED K : kΩ M : MΩ

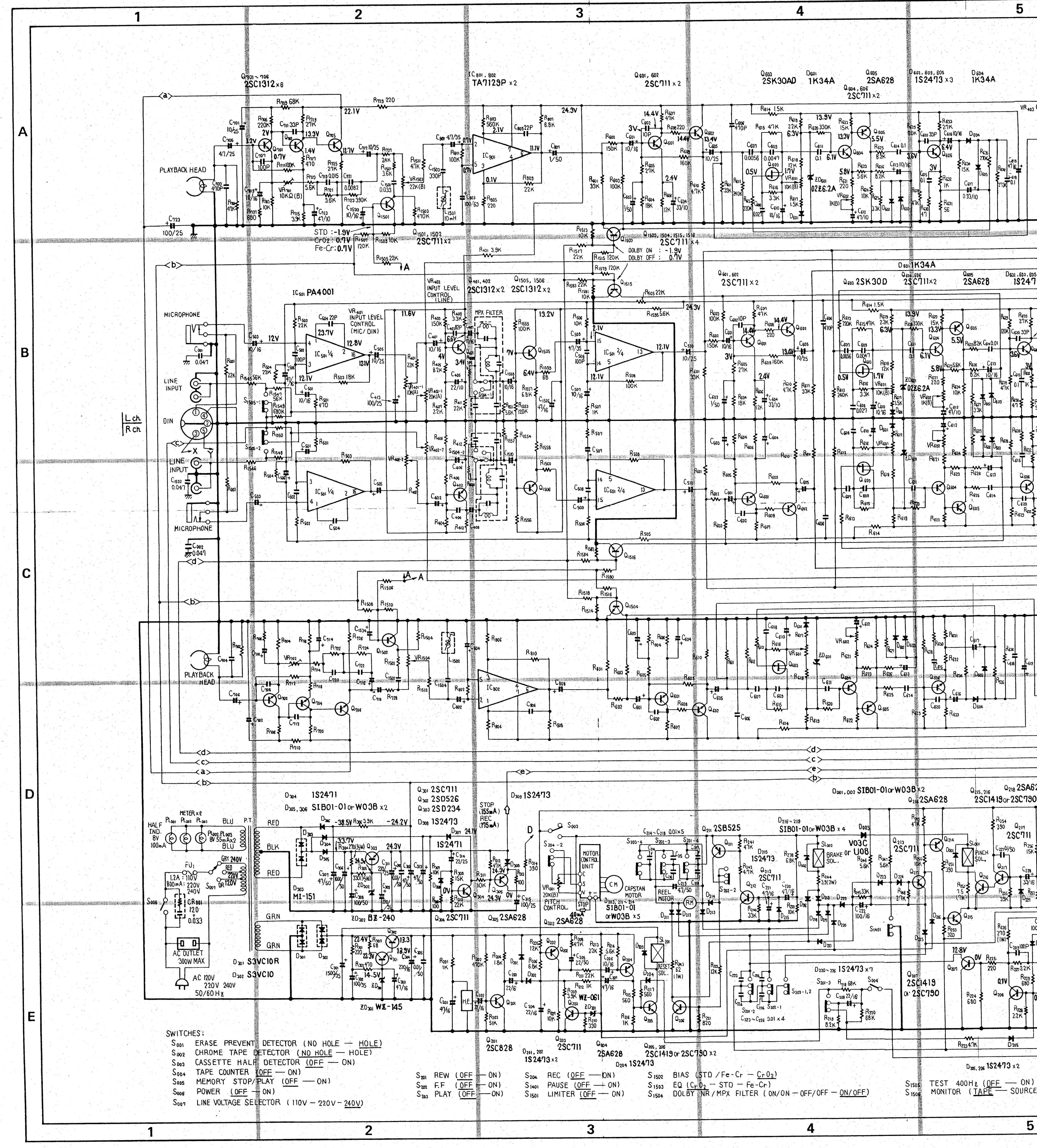
CAPACITORS;
IN μF UNLESS OTHERWISE NOTED
P : pF

3-HEAD

CASSETTE TAPE DECK

CT-F1000

D, D/G


1
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A
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C
D
E
Q701~706 2SC1312×6
IC801, 802 TA7129P ×2
Q601, 602 2SC711×2
Q603 2SK30AD
D601 1K34A
Q605 2SA628
Q604, 606 2SC711×2
D602, 603, 605 1S2473×3
D604 1K34A
PLAYBACK HEAD
STD : -1.9V
CrO2 : 0.7V
Fe-Cr : 0.7V
Q1501, 1502 2SC711×2
Q1503, 1504, 1515, 1516 2SC711×4
DOLBY ON : -1.9V
DOLBY OFF : 0.7V
IC501 PA4001
VR401 INPUT LEVEL CONTROL (MIC/DIN)
VR402 INPUT LEVEL CONTROL (LINE)
Q401, 402 2SC1312×2
Q1505, 1506 2SC1312×2
MPX FILTER
MICROPHONE
LINE INPUT
DIN
L ch
R ch
D304 1S2471
D305, 306 S1B01-01 or W03B ×2
Q301 2SC711
Q302 2SD526
Q303 2SD234
D303 1S2473
D308 1S2473
STOP (155mA)
REC (175mA)
HALF IND. 8V 100mA
METER×2
PL001 PL002 PL003 PL005
8V 55mA×2
BLU
P.T.
RED
BLK
GRN
GRY 240V
220V
120V
FU1
1.2A : 110V
800mA : 220V 240V
AC OUTLET 300W MAX
AC 120V 220V 240V 50/60Hz
D301 S3VC10R
D302 S3VC10
D303 MI-151
ZD302 BZ-240
ZD301 WZ-145
Q304 2SC711
Q305 2SA628
Q202 2SA628
VR201 20K(B) PITCH CONTROL
MOTOR CONTROL UNIT
CAPSTAN MOTOR
REEL MOTOR
D203, 211~215 S1B01-01 or W03B ×5
Q211 2SB525
D216~219 S1B01-01 or W03B ×4
BRAKE SOL.
RESET SOL.
H.E.
PINCH SOL.
V03C or U08
D001, 002 S1B01-01 or W03B ×2
Q214 2SA628
Q215, 216 2SC1419 or 2SC790
Q218 2SA62
Q201 2SC828
D201, 202 1S2473×2
Q203 2SC711
Q204 2SA628
D204 1S2473
Q205, 206 2SC1419 or 2SC790 ×2
Q207 2SC1419 or 2SC790
D205, 206 1S2473×2

SWITCHES;

S001 ERASE PREVENT DETECTOR (NO HOLE — HOLE)
S002 CHROME TAPE DETECTOR (NO HOLE — HOLE)
S003 CASSETTE HALF DETECTOR (OFF — ON)
S004 TAPE COUNTER (OFF — ON)
S005 MEMORY STOP/PLAY (OFF — ON)
S006 POWER (OFF — ON)
S007 LINE VOLTAGE SELECTOR (110V — 220V — 240V)

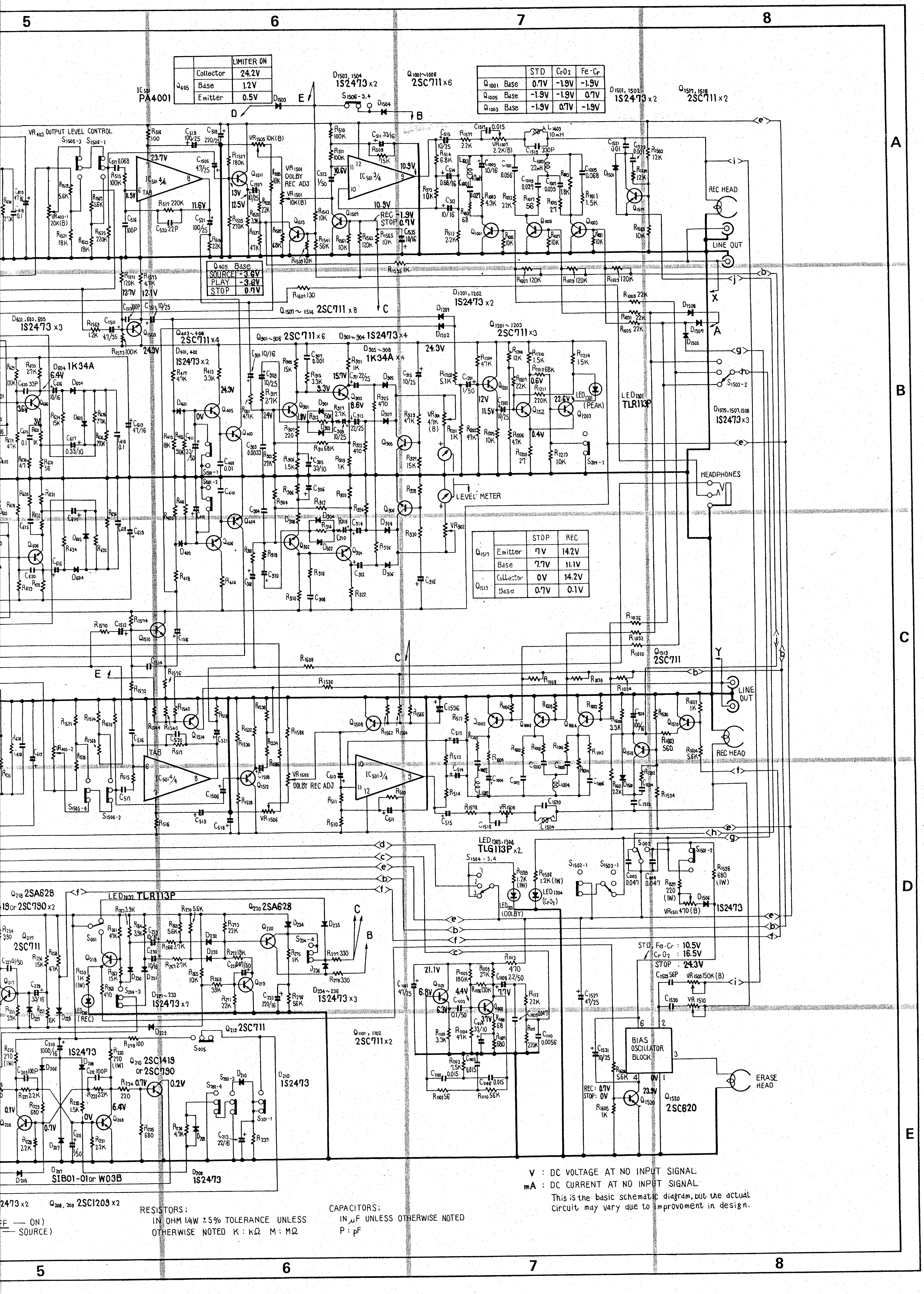
S201 REW (OFF — ON)
S202 F.F (OFF — ON)
S203 PLAY (OFF — ON)

S204 REC (OFF — ON)
S1401 PAUSE (OFF — ON)
S1501 LIMITER (OFF — ON)

S1502 BIAS (STD / Fe-Cr — CrO_2)
S1503 EQ (CrO_2 — STD — Fe-Cr)
S1504 DOLBY NR / MPX FILTER (ON/ON — OFF/OFF — ON/OFF)

S1505 TEST 400Hz (OFF — ON)
S1506 MONITOR (TAPE — SOURCE

PIONEER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A
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IC501 PA4001
VR403 OUTPUT LEVEL CONTROL
D1503, 1504 1S2473 x2
Q1001~1006 2SC711 x6
D1501, 1502 1S2473 x2
Q1517, 1518 2SC711 x2
VR1501 DOLBY REC ADJ
REC HEAD
LINE OUT
HEADPHONES
LEVEL METER
LED1301 TLR113P
D1505, 1507, 1508 1S2473 x3
Q1201~1203 2SC711 x3
D1201, 1202 1S2473 x2
Q1507~1514 2SC711 x8
Q403~406 2SC711 x4
D401, 402 1S2473 x2
Q901~906 2SC711 x6
D901~904 1S2473 x4
D905~908 1K34A x4
D602, 603, 605 1S2473 x3
Q604 1K34A
Q1519 2SC711
LED1303, 1304 TLG113P x2
LED1032 TLR113P
Q218 2SA628
Q220 2SA628
D227~233 1S2473 x7
D234~236 1S2473 x3
Q213 2SC711
Q210 2SC1419 or 2SC790
D210 1S2473
D209 1S2473
D201 SIB01-01 or W03B
Q101, 1102 2SC711 x2
BIAS OSCILLATOR BLOCK
ERASE HEAD
Q1520 2SC620
STD, Fe-Cr : 10.5V
CrO2 : 16.5V
STOP : 24.3V
REC : 0.7V
STOP : 0V
Q208, 209 2SC1209 x2

		LIMITER ON
Q405	Collector	24.2V
	Base	1.2V
	Emitter	0.5V

	STD	CrO2	Fe-Cr
Q1001 Base	0.7V	-1.9V	-1.9V
Q1005 Base	-1.9V	-1.9V	0.7V
Q1003 Base	-1.9V	0.7V	-1.9V

Q405	Base
SOURCE	-3.6V
PLAY	-3.6V
STOP	0.7V

		STOP	REC
Q1517	Emitter	7V	14.2V
	Base	7.7V	11.1V
Q1513	Collector	0V	14.2V
	Base	0.7V	0.1V

V : DC VOLTAGE AT NO INPUT SIGNAL
mA : DC CURRENT AT NO INPUT SIGNAL
This is the basic schematic diagram, but the actual circuit may vary due to improvoment in design.

RESISTORS;
IN OHM 1/4W ±5% TOLERANCE UNLESS OTHERWISE NOTED K : kΩ M : MΩ

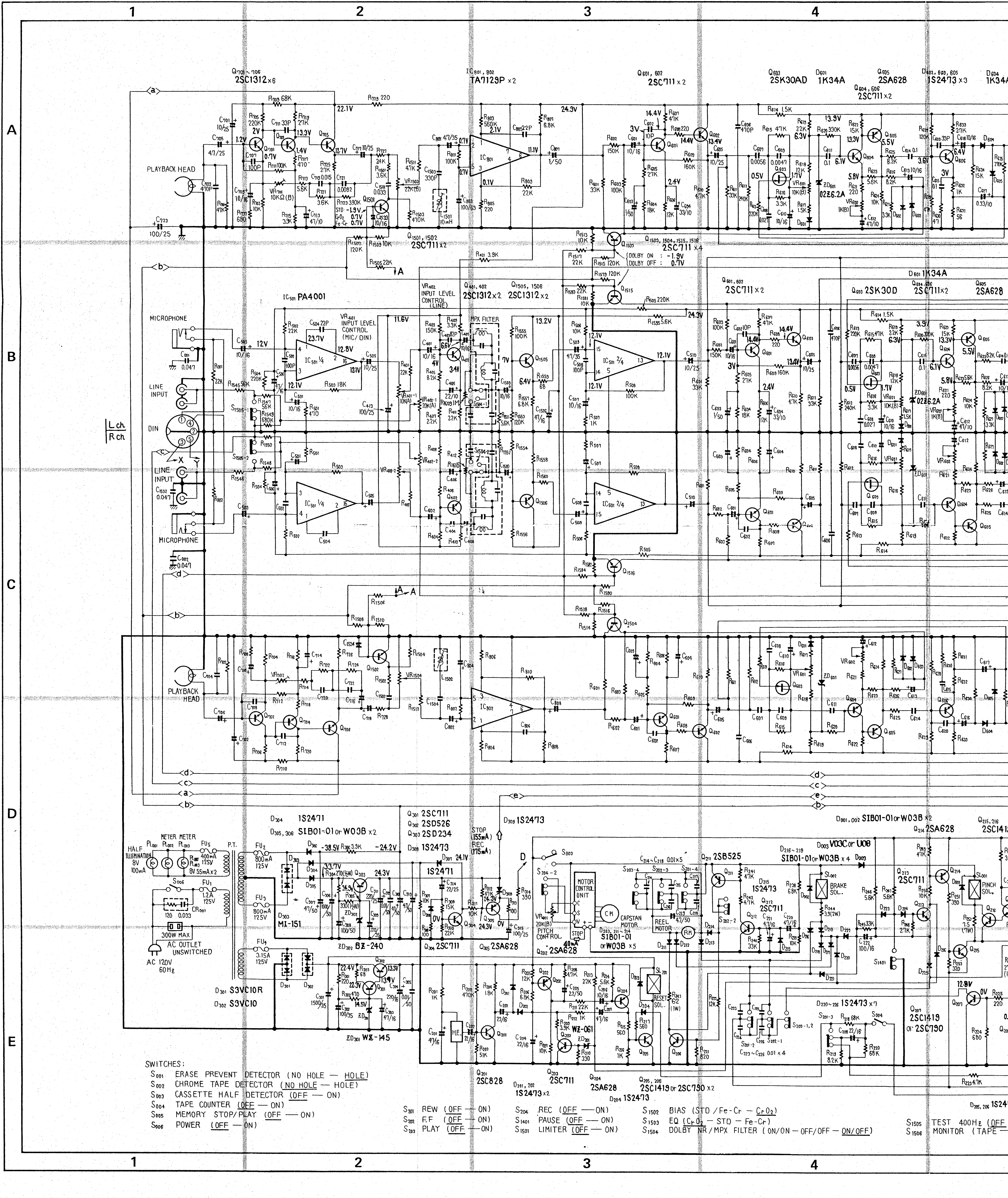
CAPACITORS;
IN μF UNLESS OTHERWISE NOTED
P : pF

3-HEAD

CASSETTE TAPE DECK

CT-F1000

KCU



1
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A
B
C
D
E
Q701~706 2SC1312×6
IC801, 802 TA7129P ×2
Q601, 602 2SC711 ×2
Q603 2SK30AD
D601 1K34A
Q605 2SA628
Q604, 606 2SC711×2
D602, 603, 605 1S2473 ×3
PLAYBACK HEAD
IC501 PA4001
VR401 INPUT LEVEL CONTROL (MIC/DIN)
VR402 INPUT LEVEL CONTROL (LINE)
Q401, 402 2SC1312×2
Q1505, 1506 2SC1312×2
MPX FILTER
Q1501, 1502 2SC711×2
Q1503, 1504, 1515, 1516 2SC711 ×4
DOLBY ON : -1.9V
DOLBY OFF : 0.7V
MICROPHONE
LINE INPUT
DIN
L ch
R ch
Q603 2SK30D
HALF ILLUMINATION 8V 100mA
METER METER
P.T.
AC OUTLET UNSWITCHED
300W MAX
AC 120V 60Hz
D301 S3VC10R
D302 S3VC10
D304 1S2471
D305, 306 S1B01-01 or W03B ×2
Q301 2SC711
Q302 2SD526
Q303 2SD234
D308 1S2473
D309 1S2473
STOP (155mA)
REC (175mA)
MOTOR CONTROL UNIT
CAPSTAN MOTOR
REEL MOTOR
PITCH CONTROL
ZD302 BZ-240
ZD301 WZ-145
D303 M1-151
Q304 2SC711
Q305 2SA628
Q202 2SA628
D203, 211~214 S1B01-01 or W03B ×5
Q211 2SB525
D216~219 S1B01-01 or W03B ×4
D003 V03C or U06
D001, 002 S1B01-01 or W03B ×2
Q214 2SA628
BRAKE SOL.
PINCH SOL.
RESET SOL.
D220~226 1S2473 ×7
Q207 2SC1419 or 2SC790
Q201 2SC828
D201, 202 1S2473×2
Q203 2SC711
Q204 2SA628
D204 1S2473
Q205, 206 2SC1419 or 2SC790 ×2
ZD201 WZ-061
H.E.

SWITCHES:

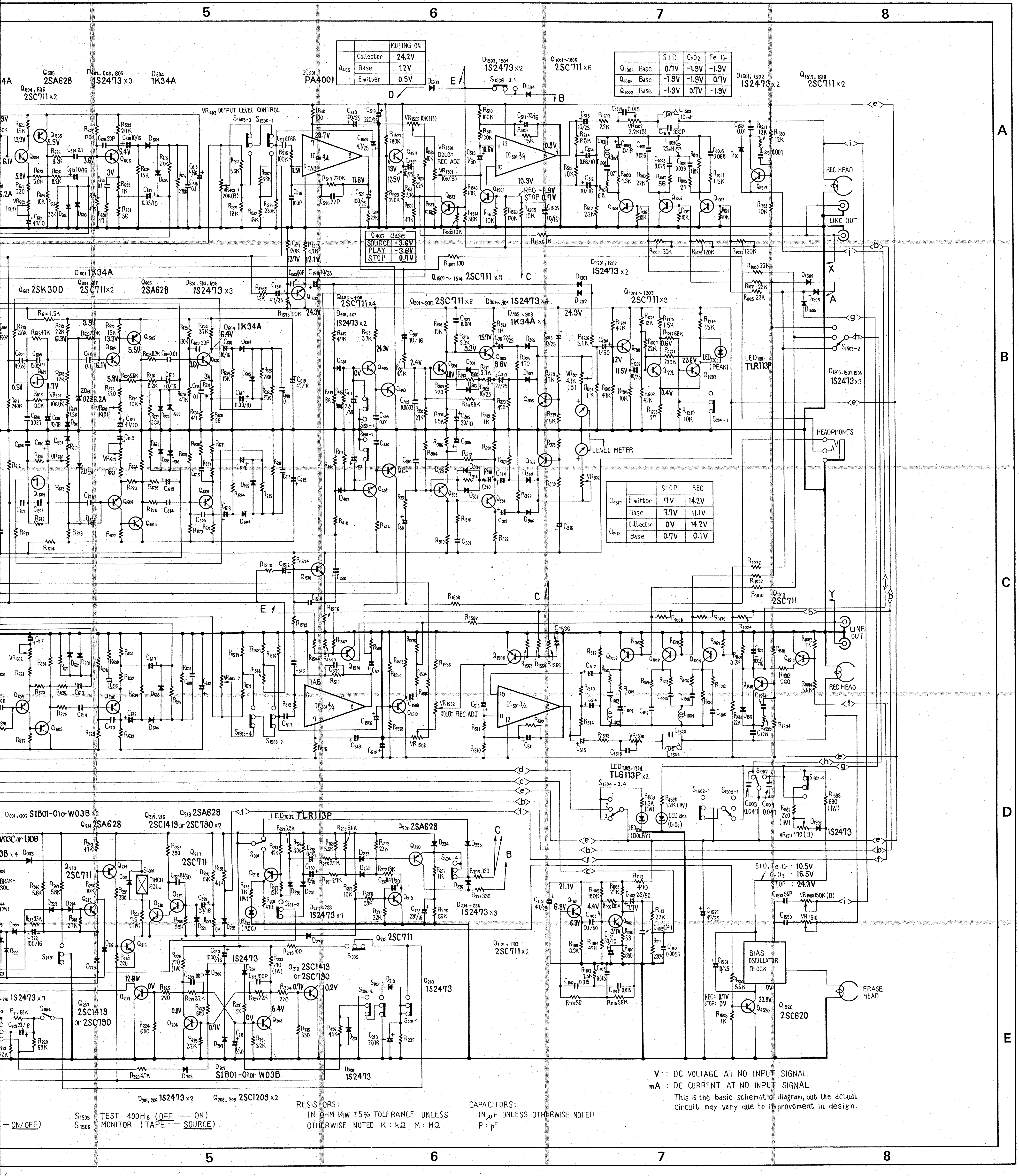
S001 ERASE PREVENT DETECTOR (NO HOLE — HOLE)
S002 CHROME TAPE DETECTOR (NO HOLE — HOLE)
S003 CASSETTE HALF DETECTOR (OFF — ON)
S004 TAPE COUNTER (OFF — ON)
S005 MEMORY STOP/PLAY (OFF — ON)
S006 POWER (OFF — ON)

S201 REW (OFF — ON)
S202 F.F (OFF — ON)
S203 PLAY (OFF — ON)

S204 REC (OFF — ON)
S1401 PAUSE (OFF — ON)
S1501 LIMITER (OFF — ON)

S1502 BIAS (STD / Fe-Cr — CrO2)
S1503 EQ (CrO2 — STD — Fe-Cr)
S1504 DOLBY NR / MPX FILTER (ON/ON — OFF/OFF — ON/OFF)

S1505 TEST 400Hz (OFF
S1506 MONITOR (TAPE —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A
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C
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IC501 PA4001
Q605 2SA628
D602, 603, 605 1S2473 x3
D604 1K34A
Q604, 606 2SC711 x2
D1503, 1504 1S2473 x2
Q1001~1006 2SC711 x6
D1501, 1502 1S2473 x2
Q1517, 1518 2SC711 x2
VR403 OUTPUT LEVEL CONTROL
VR1501 DOLBY REC ADJ
REC -1.9V
STOP 0.7V
REC HEAD
LINE OUT
D601 1K34A
Q603 2SK30D
Q601, 602 2SC711 x2
Q605 2SA628
D602, 603, 605 1S2473 x3
D604 1K34A
Q1507~1514 2SC711 x8
D1201, 1202 1S2473 x2
Q1201~1203 2SC711 x3
Q403~408 2SC711 x4
D401, 402 1S2473 x2
Q901~906 2SC711 x6
D301~304 1S2473 x4
D305~308 1K34A x4
LED1301 TLR113P
LED (PEAK)
D1505, 1507, 1508 1S2473 x3
LEVEL METER
HEADPHONES
Q1515 2SC711
LINE OUT
REC HEAD
DOLBY REC ADJ
LED1303, 1304 TLG113P x2
LED (DOLBY)
LED (CrO2)
D001, 002 S1B01-01 or W03B x2
Q215, 216 2SC1419 or 2SC790 x2
Q218 2SA628
Q214 2SA628
LED202 TLR113P
Q220 2SA628
Q213 2SC711
Q217 2SC711
BRAKE SOL.
PINCH SOL.
D227~233 1S2473 x7
D234~236 1S2473 x3
Q219 2SC711
Q210 2SC1419 or 2SC790
D210 1S2473
Q207 2SC1419 or 2SC790
D207 S1B01-01 or W03B
D209 1S2473
D205, 206 1S2473 x2
Q208, 209 2SC1209 x2
Q1101, 1102 2SC711 x2
STD, Fe-Cr : 10.5V
CrO2 : 16.5V
STOP : 24.3V
BIAS OSCILLATOR BLOCK
ERASE HEAD
REC: 0.1V
STOP: 0V
Q1520 2SC620

		MUTING ON
Q405	Collector	24.2V
	Base	1.2V
	Emitter	0.5V

	STD	CrO2	Fe-Cr
Q1001 Base	0.7V	-1.9V	-1.9V
Q1005 Base	-1.9V	-1.9V	0.7V
Q1003 Base	-1.9V	0.7V	-1.9V

Q405 Base	
SOURCE	-3.6V
PLAY	-3.6V
STOP	0.7V

		STOP	REC
Q1517	Emitter	7V	14.2V
	Base	7.7V	11.1V
Q1519	Collector	0V	14.2V
	Base	0.7V	0.1V

V : DC VOLTAGE AT NO INPUT SIGNAL
mA : DC CURRENT AT NO INPUT SIGNAL
This is the basic schematic diagram, but the actual circuit may vary due to improvoment in design.

RESISTORS;
IN OHM 1/4W ±5% TOLERANCE UNLESS OTHERWISE NOTED K : kΩ M : MΩ

CAPACITORS;
IN μF UNLESS OTHERWISE NOTED
P : pF

— ON/OFF)

S1505 TEST 400Hz (OFF — ON)
S1506 MONITOR (TAPE — SOURCE)